

TV5-307UW



Specifications

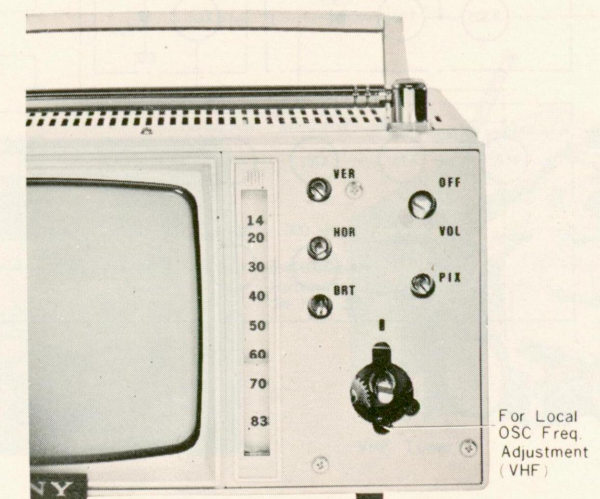
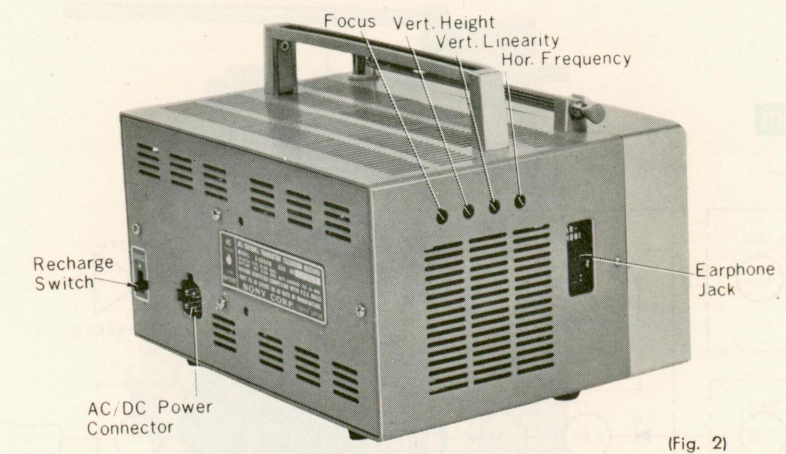
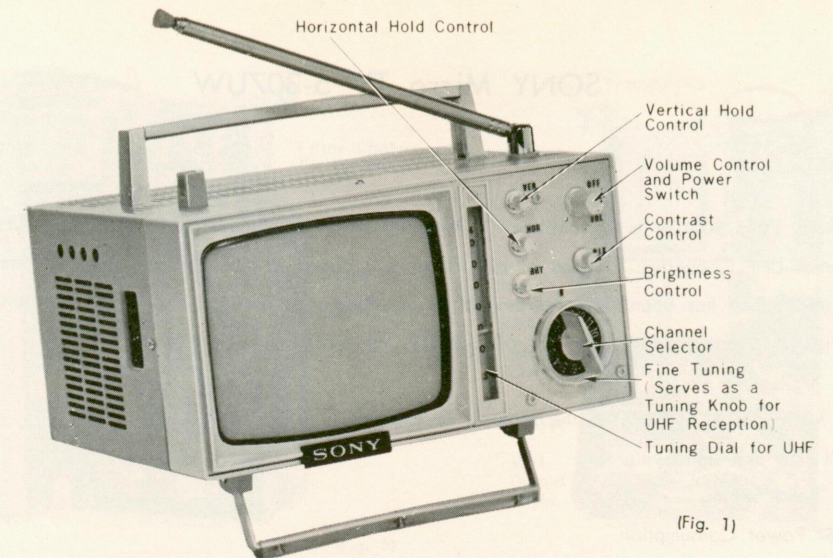
Picture Tube :	5", 70° Deflection, Aluminized Screen
Transistor :	25 (7 Silicon-including 5 Epitaxial 18 Germanium)
Diode :	19 (including 4 Selenium)
Channel Coverage :	A2—A13 in VHF Band and A14—A83 in UHF Band
Tuner :	Disc Turret Type for VHF Band and Continuous Tuning Type for UHF Band
Maximum Sensitivity :	VHF $5\mu\text{V}$ (10 Vpp at Picture Tube Cathode) UHF $5\mu\text{V}$ (10 Vpp at Picture Tube Cathode)
IF Circuit :	3 Stages with 4 Stagger Tuned Elements Video IF 26.75 Mc, Sound IF 22.25 Mc, Band Width 3.0 Mc
Resolution :	Horizontal 300 lines, Vertical 400 lines
Sound System :	4.5 Intercarrier System Power Output Stage ; OTL System, 300 mW Speaker 3", 40 Ω Voice Coil
Automatic Control :	Pulse-operated AGC, Diode AFC, (Automatic Noise Suppressor)
Power Requirements :	AC 117 V, 60 c/s, DC 12 V Battery
Power Consumption :	AC 12.4 W DC 9.2 W
Dimensions :	8-3/8" (W) \times 6-5/8" (D) \times 4-1/4" (H)
Weight :	8-1/2 lbs.
Glare Proofing :	Smoked Filter, 70% Transparency
Battery Recharge :	Built-in Recharge Switch

SONY®
SERVICING GUIDE

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External View



SONY Micro TV 5-307UW

General

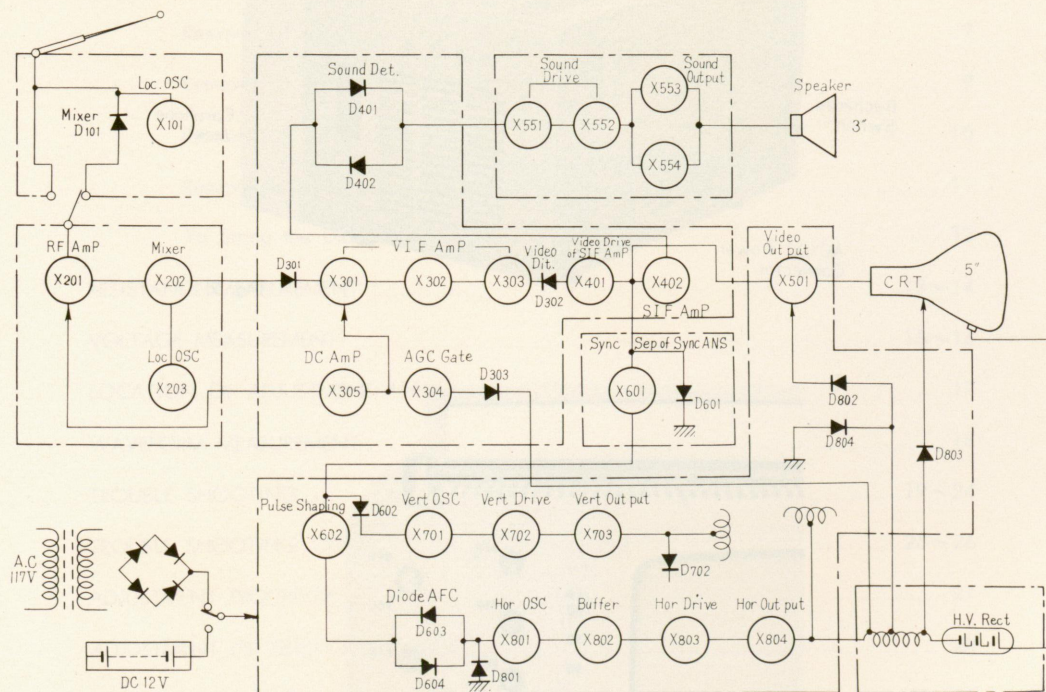
The SONY Micro TV 5-307UW is a transistor TV Receiver which can receive both VHF and UHF bands without using an external UHF Converter. Design of this model was aimed to make the size as small as possible and for this purpose great effort has been made to develop a miniature type Tuner Block. As the result, the size of the set became slightly larger in width than that of 5-303W, the VHF single band model.

FEATURES

The SONY Micro TV 5-307UW has the features as follows :

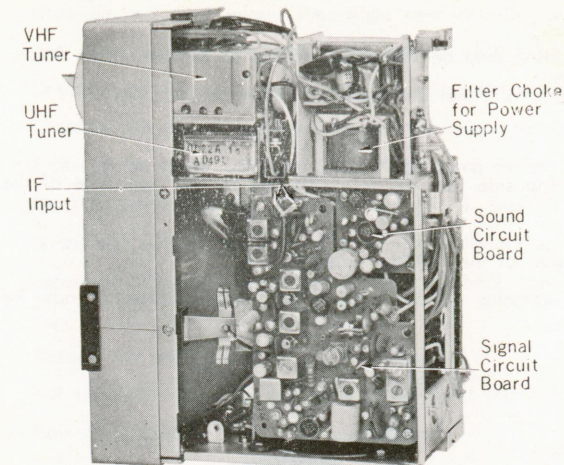
1. Small size and light weight
2. Easy Band Setting
3. Lower Power Consumption
4. Perfect Operation as a completely portable TV Set under all conditions
5. Easy Servicing

Block Diagram

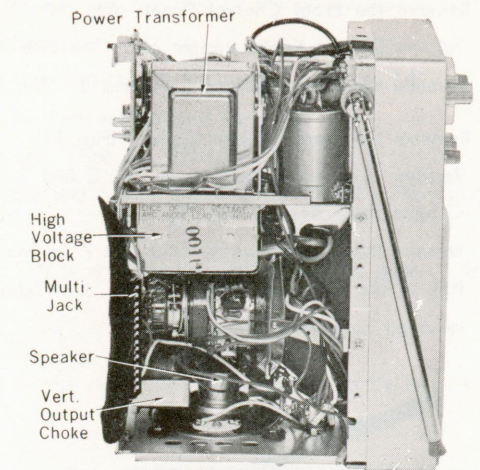


(Fig. 4)

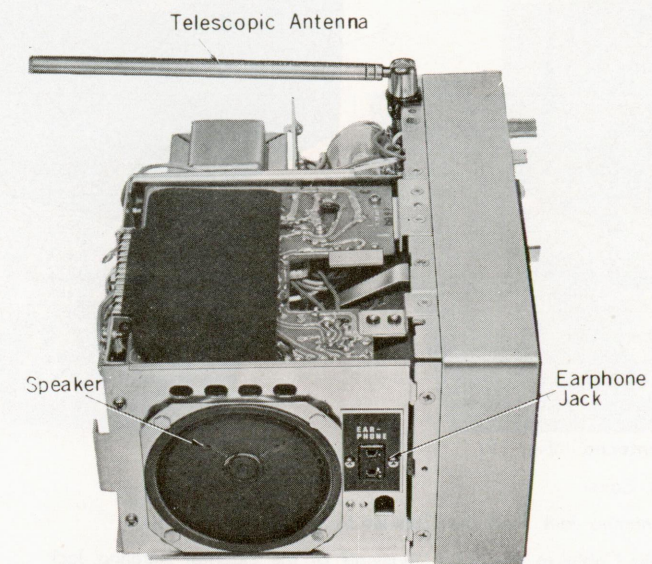
Electronic Parts Location



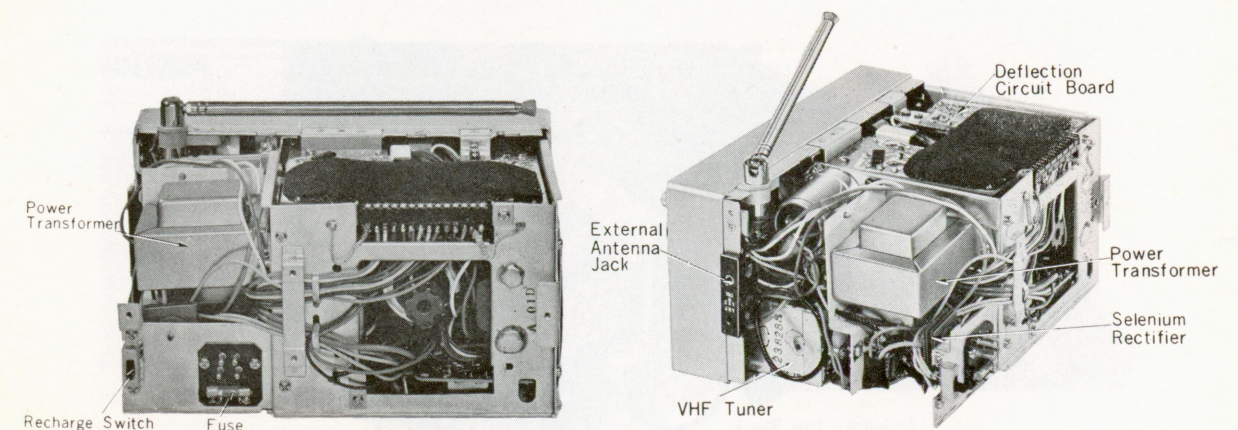
(Fig. 5)



(Fig. 6)



(Fig. 7)



(Fig. 8)

(Fig. 9)

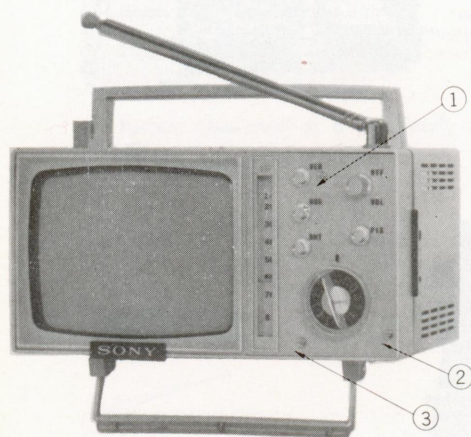
Method of Disassembling the Set

To Remove the Front Control Panel (Fig. 10)

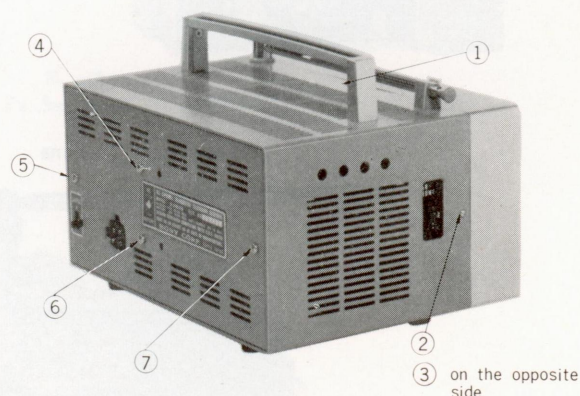
1. Pull all Control Knobs straight out. The Fine Tuning Knob may be somewhat difficult to remove... use force.
2. Remove three black screws 1, 2 and 3. The Front Control Panel can now be removed. See Fig. 10.

To Remove the Back Cabinet Cover (Fig. 11)

1. Remove the three small screws 1, 2 and 3 on the top side, on the left side and on the right side of the Cabinet respectively. See Fig. 11.
2. Remove the four screws 4, 5, 6 and 7 on the back side of the Cabinet. See Fig. 11.
3. Pull up the Telescopic Antenna from the Telescopic Antenna Catch. The Back Cabinet Cover can now be removed by pulling straight back.



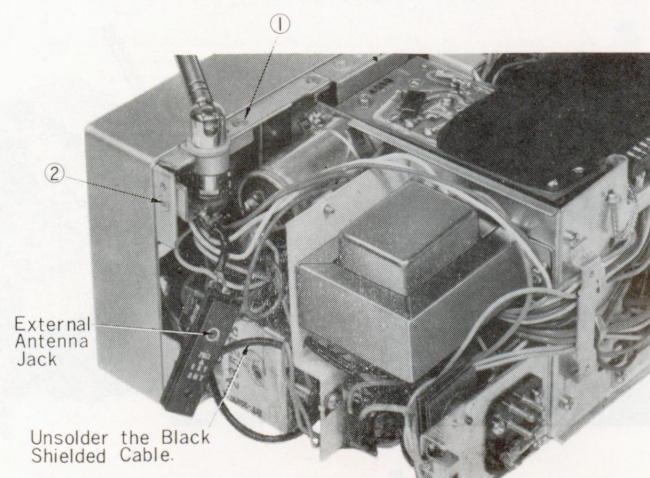
(Fig. 10)



(Fig. 11)

To Remove the Telescopic Antenna (Fig. 12)

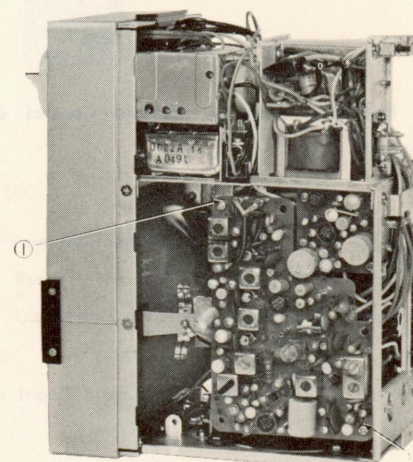
1. Remove the Back Cabinet Cover.
2. Disengage the External Antenna Jack from the Cabinet by pulling straight back.
3. Unsolder the short Shielded Cable at the upper terminals of the External Antenna Jack.
4. Remove the two screws 1 and 2. The Telescopic Antenna can now be detached. See Fig. 12.



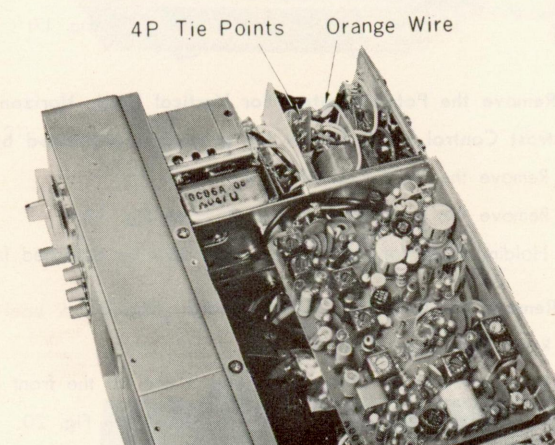
(Fig. 12)

To Remove the Tuner Block (Fig. 13, 14, 15, 16)

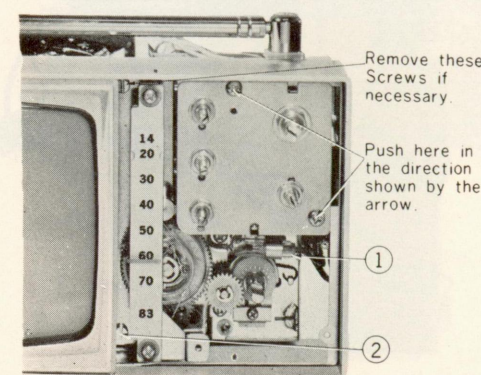
1. Remove the Back Cabinet Cover.
2. Unsolder the two wires, the white one for AGC signal input and the red one for the power supply to the VHF Tuner, at the terminals on the bottom of the Set. See Fig. 13.
3. Unsolder the Orange wire for the power supply to the UHF Tuner, at the 4P Tie-points. See Fig. 14.
4. Unsolder the Black Shielded Cable at the lower terminals of the External Antenna Jack.
5. Push out the Neon Lamp from the Neon Lamp Holder to the Left. See Fig. 15.
6. Remove the two screws 1 and 2 in Fig. 13 and lift the front end of the Signal Circuit Board. The Circuit Board will swing around the axis of the Multi-jack.
7. Loosen the Flat Headed Screw located on the partition plate. It is not necessary to remove this screw. See Fig. 16.
8. Remove the two screws 1 and 2 in Fig. 15.
9. Pull the Tuner Block straight toward the front and then move to the right. The Tuner Block can be taken out from the Cabinet.



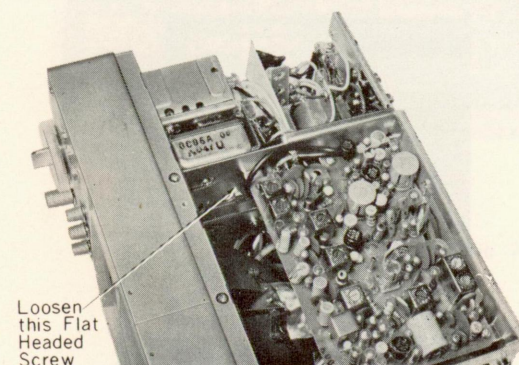
(Fig. 13)



(Fig. 14)



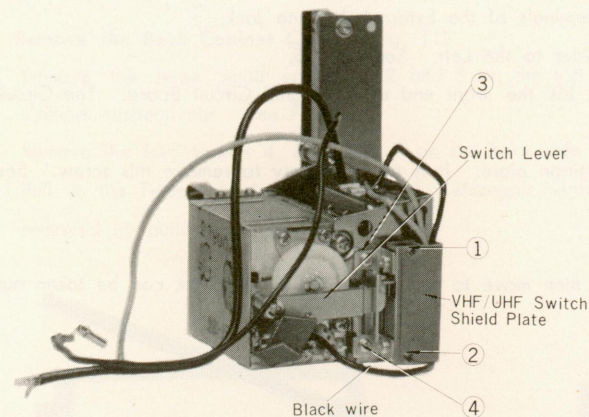
(Fig. 15)



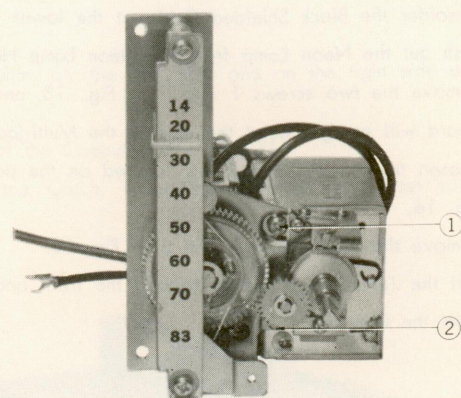
(Fig. 16)

To Separate the VHF Tuner from the Tuner Block (Fig. 17, 18)

1. Remove the two screws 1 and 2 to detach the VHF/UHF Switch Shield Plate. See Fig. 17.
2. Unsolder the Black wire at the terminal of the VHF/UHF Switch.
3. Remove the two screws 3 and 4 in Fig. 17.
4. Remove the two screws 1 and 2 in Fig. 18.



(Fig. 17)



(Fig. 18)

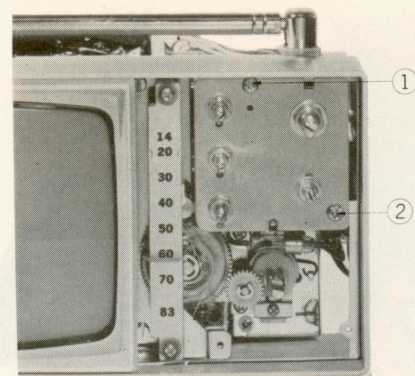
To Remove the Potentiometers for Vertical Hold, Horizontal Hold, Brightness Control, Volume Control and Contrast Control (PIX), follow the procedure explained below. (Fig. 19)

1. Remove the Front Control Panel.
2. Remove the two screws 1 and 2. See Fig. 19.

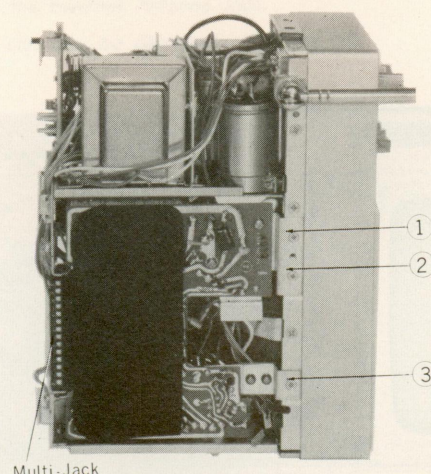
The Holding Plate for Potentiometer can now be detached from the chassis.

To Remove the Deflection Circuit Board (Fig. 20)

1. Remove the Back Cabinet Cover.
2. Remove the three screws 1, 2 and 3 and lift the front side end of the Circuit Board. The Circuit Board will swing around the axis of the Multi-jack. See Fig. 20.
3. Pull out the eight wires, Green, Blue, Orange, Brown, Black, White and two Yellow ones, from the pins on the Circuit Board. Be careful not to confuse the corresponding pins for the two Yellow wires in assembling.
4. The Circuit Board can now be removed as a unit by pulling away from the Multi-jack.



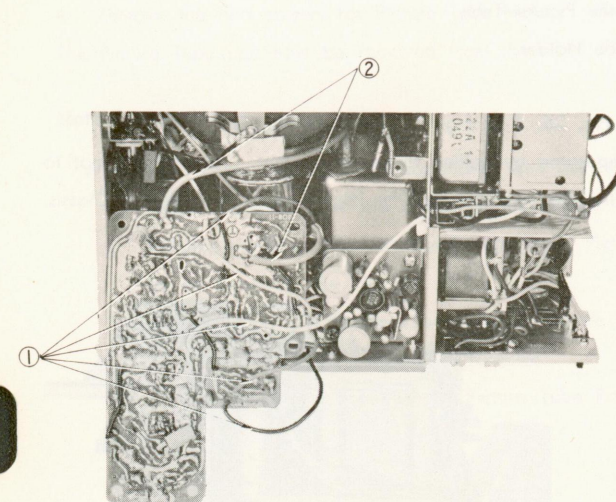
(Fig. 19)



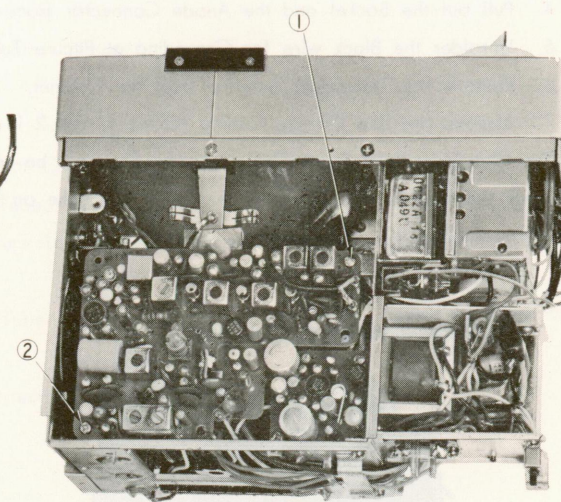
(Fig. 20)

To Remove the Signal Circuit Board (Fig. 21, 22)

1. Remove the Screws 1 and 2. See Fig. 21.
2. Unsolder the fine leads 1 and two gray Shielded leads 2. See Fig. 22.



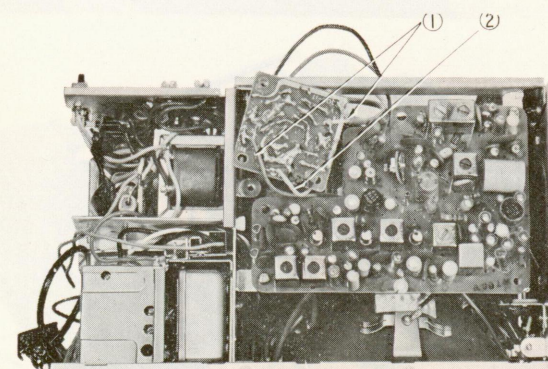
(Fig. 21)



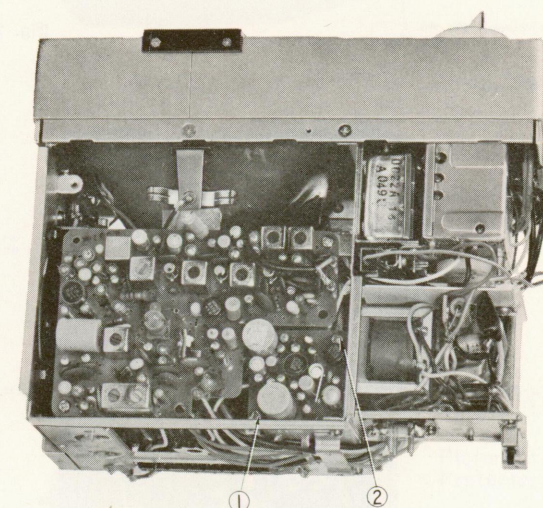
(Fig. 22)

To Remove the Sound Circuit Board (Fig. 23, 24)

1. Remove the Screws 1 and 2. See Fig. 23.
2. Unsolder the two Shielded leads 1, and a Brown lead 2. See Fig. 24.



(Fig. 23)

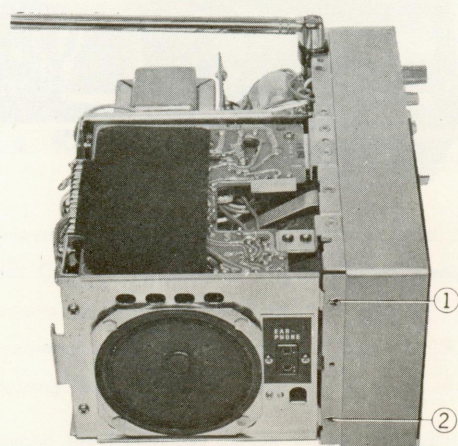


(Fig. 24)

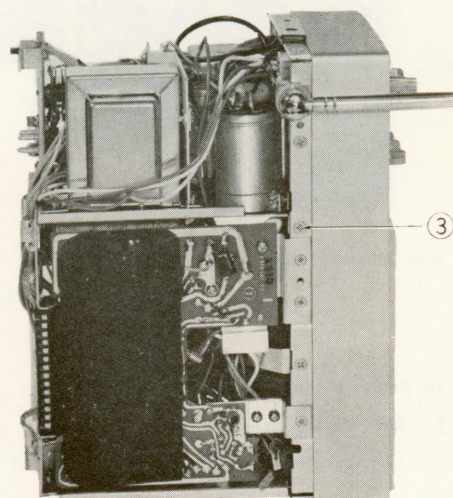
To Remove the Chassis (Fig. 25, 26, 27, 28)

1. Pull out all the Control Knobs.
2. Remove the Front Control Panel.
3. Remove the two securing screws for Potentiometer Holding Plate.
4. Pull out the Socket and the Anode Connector from the Picture Tube.
5. Unsolder the Black wire for Grounding at Picture Tube Holder.
6. Remove the Telescopic Antenna from the Cabinet.
7. Remove the four Chassis holding screws 1 and 2 in Fig. 25, 3 in Fig. 26 and 4 in Fig. 27.

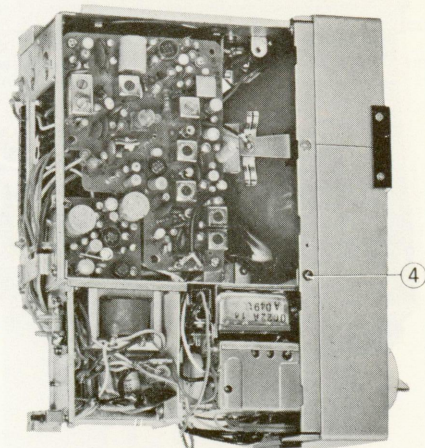
The Chassis and the Front Cabinet Frame can now be separated by pulling away each other. Be careful not to break the lead wires connecting the Deflection Yoke on the Picture Tube and the High Voltage Block in the Chassis.



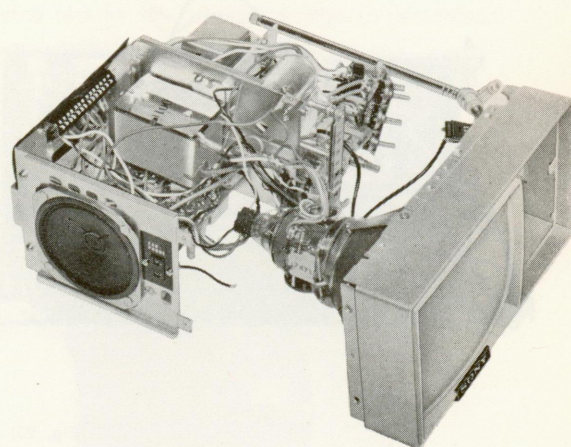
(Fig. 25)



(Fig. 26)



(Fig. 27)



(Fig. 28)

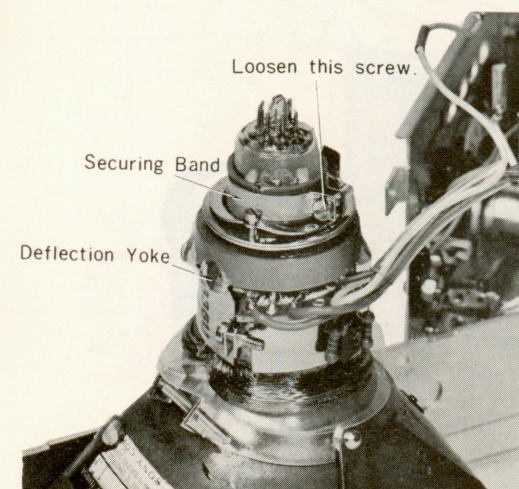
To Remove the Picture Tube (Fig. 29, 30)

1. Separate the Chassis and the Front Cabinet Frame.
 2. Remove the Deflection Yoke from the Picture Tube by loosening the screw on the Securing Band. See Fig. 29.
 3. Loosen the Securing Screw for Picture Tube Holder.
 4. Remove the two screws for Picture Tube Holder. See Fig. 29.
- The Picture Tube can now be removed from the Front Cabinet Frame.

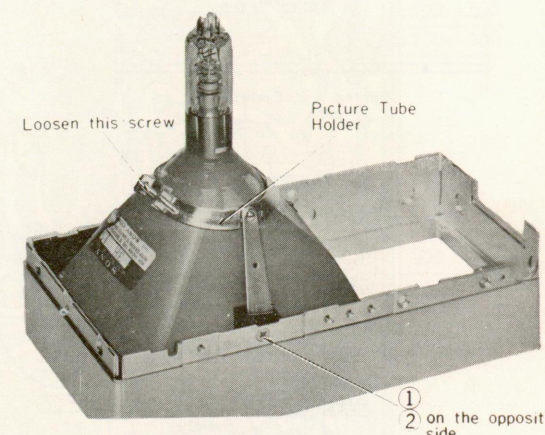
Note :

When the Picture Tube is to be assembled with the Front Cabinet Frame, be careful to the followings.

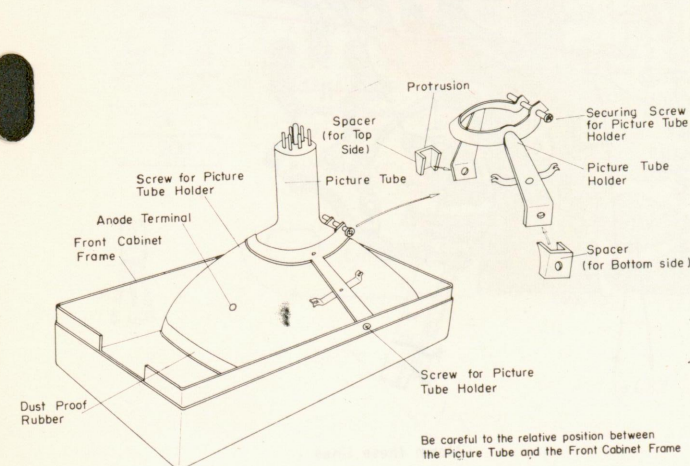
1. Clean the surface of the screen of the Picture Tube.
2. Relative positions between the Picture Tube, Picture Tube Holder, Spacer and the Front Cabinet Frame must be as shown in the Fig. 31.
3. In assembling the Picture Tube with the Picture Tube Protector, attach the Dust Proof Rubber to cover the joint live of the Tube and the Protector.
4. Do not leave any between the Picture Tube Protector and the Mask.



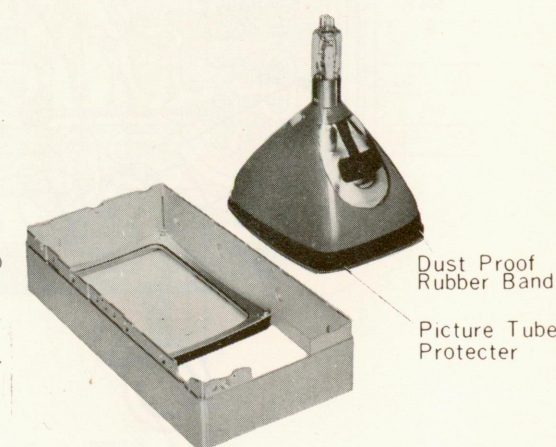
(Fig. 29)



(Fig. 30)



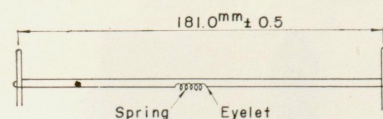
(Fig. 31)



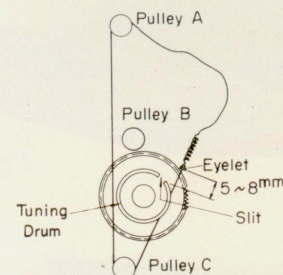
(Fig. 32)

To String the Dial Cord for Tuner

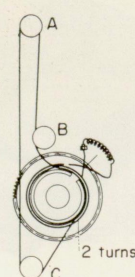
1. Determine the required length of the Cord in accordance with Fig. 33.
2. Detach the Dial Scale and the Pointer Rail from the Tuner Block by removing the two screws 1 and 2. See Fig. 37.
3. Thread the Cord on the Pulley A and C so that the end of the Spring comes to the position 5~8mm apart from the slit on the Tuning Drum and then secure temporarily the Cord at the Pulley C with the finger. See Fig. 34.
4. Thread the Pulley A side of the Cord on the Pulley B and then wind two turns around the Tuning Drum clockwise.
5. Twist the ends of the Cord by half turn so that they cross over each other. See Fig. 35.
6. Hook the Spring on the Shaft of the Tuning Drum.
7. Attach the Pointer to the Cord. See Fig. 36.



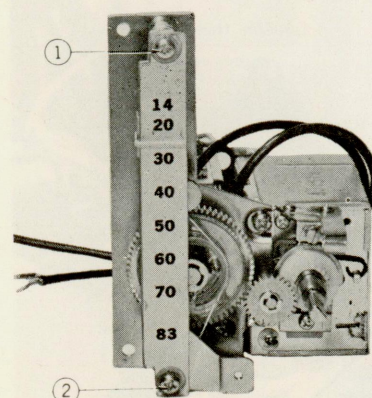
(Fig. 33)



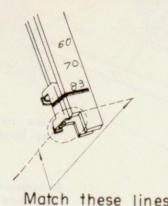
(Fig. 34)



(Fig. 35)



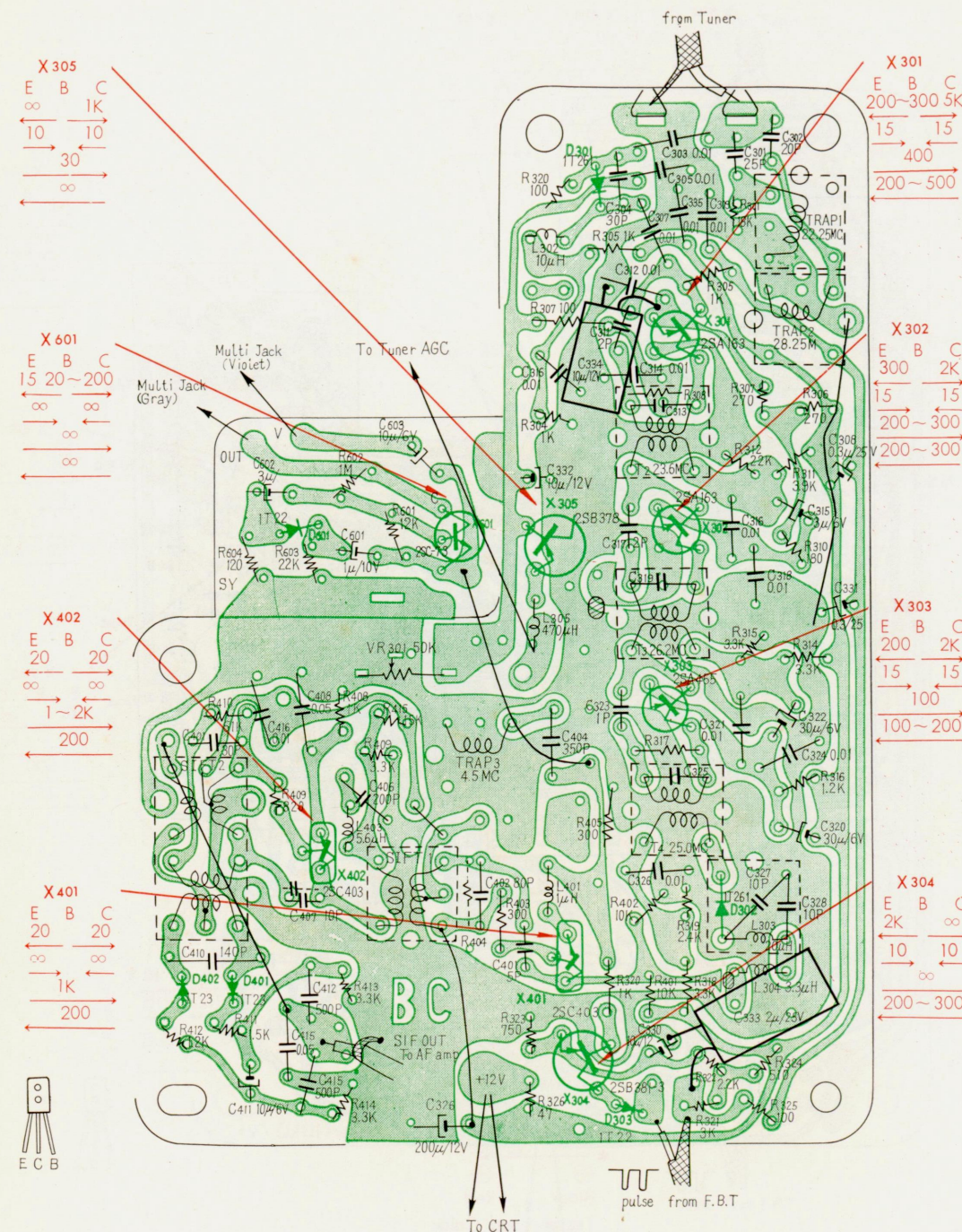
(Fig. 36)



(Fig. 37)

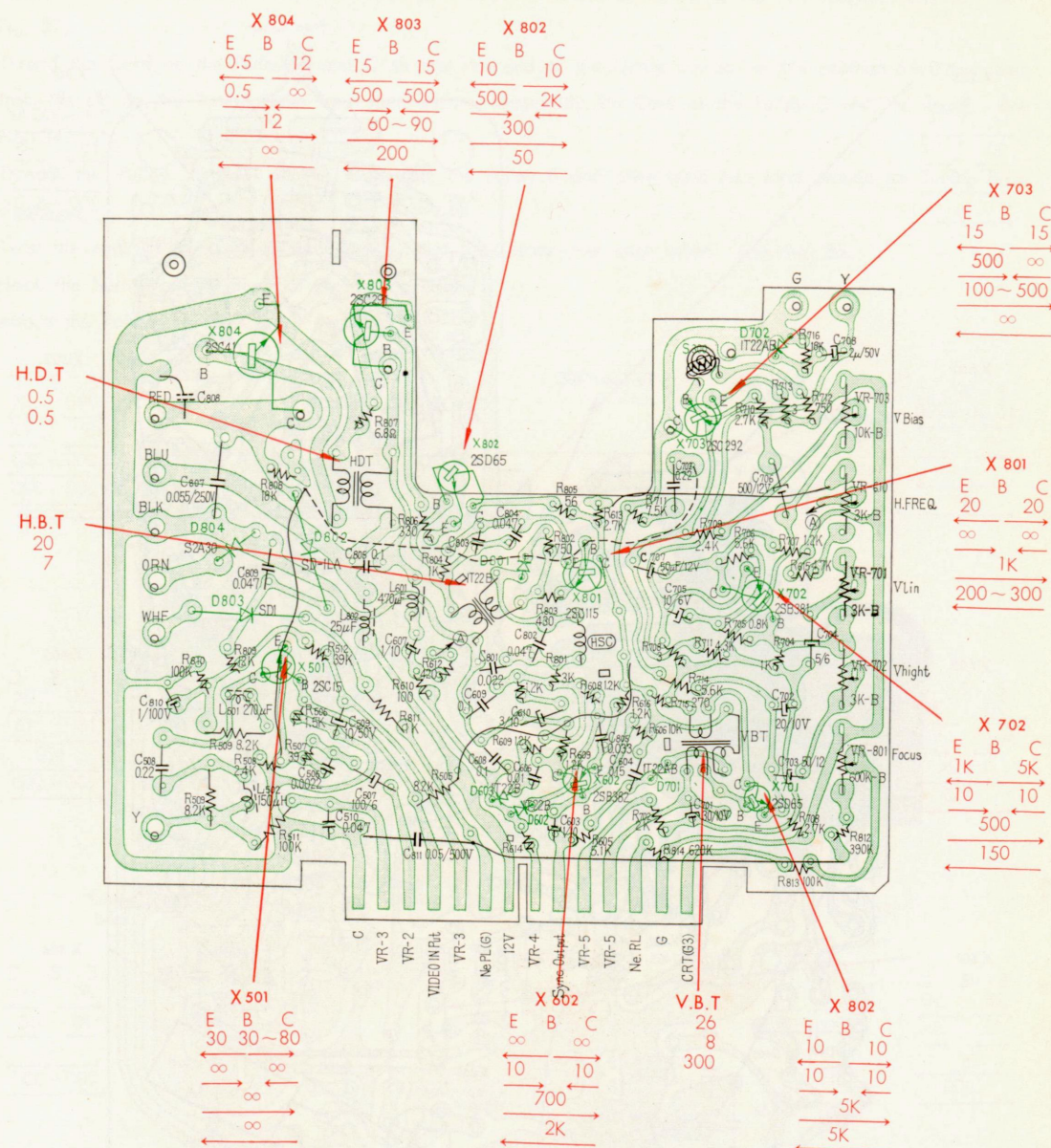
Resistance Measurement

— Signal Circuit Board —



Resistance Measurement

—Video Circuit Board—



* Measured with Circuit Tester (10kΩ/V)

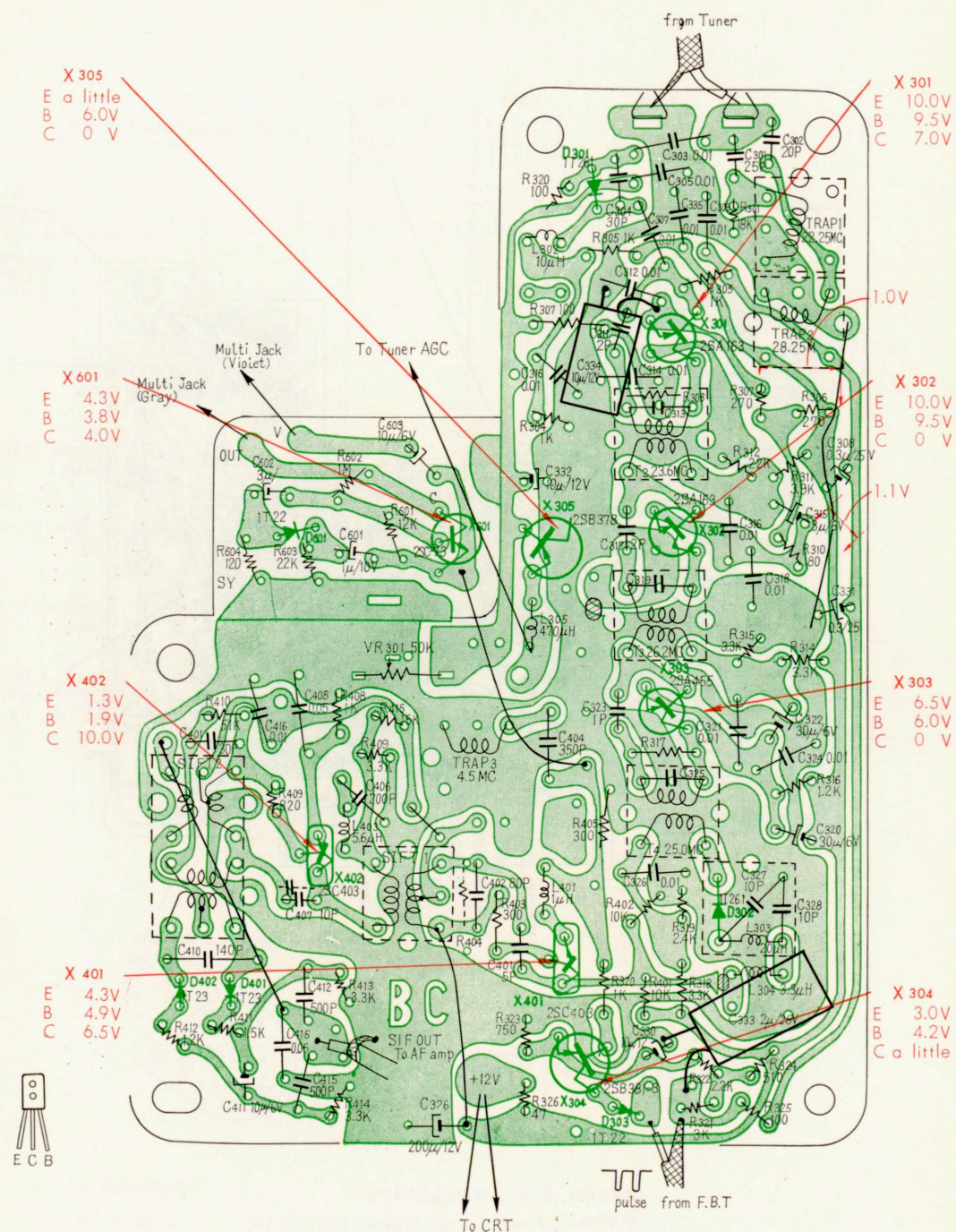
* ⊕ ⊖
Black Red
Tester Lead Color
* Resistance in ohm

Resistance Chart

	VBT	HDT	HBT
Primary	26 Ω	0.5 Ω	20 Ω
Secondary	8 Ω	0.5 Ω	7 Ω
Ternary	300 Ω	—	—

Voltage Measurement

—Signal Circuit Board—



* Power Supply Voltage 12V

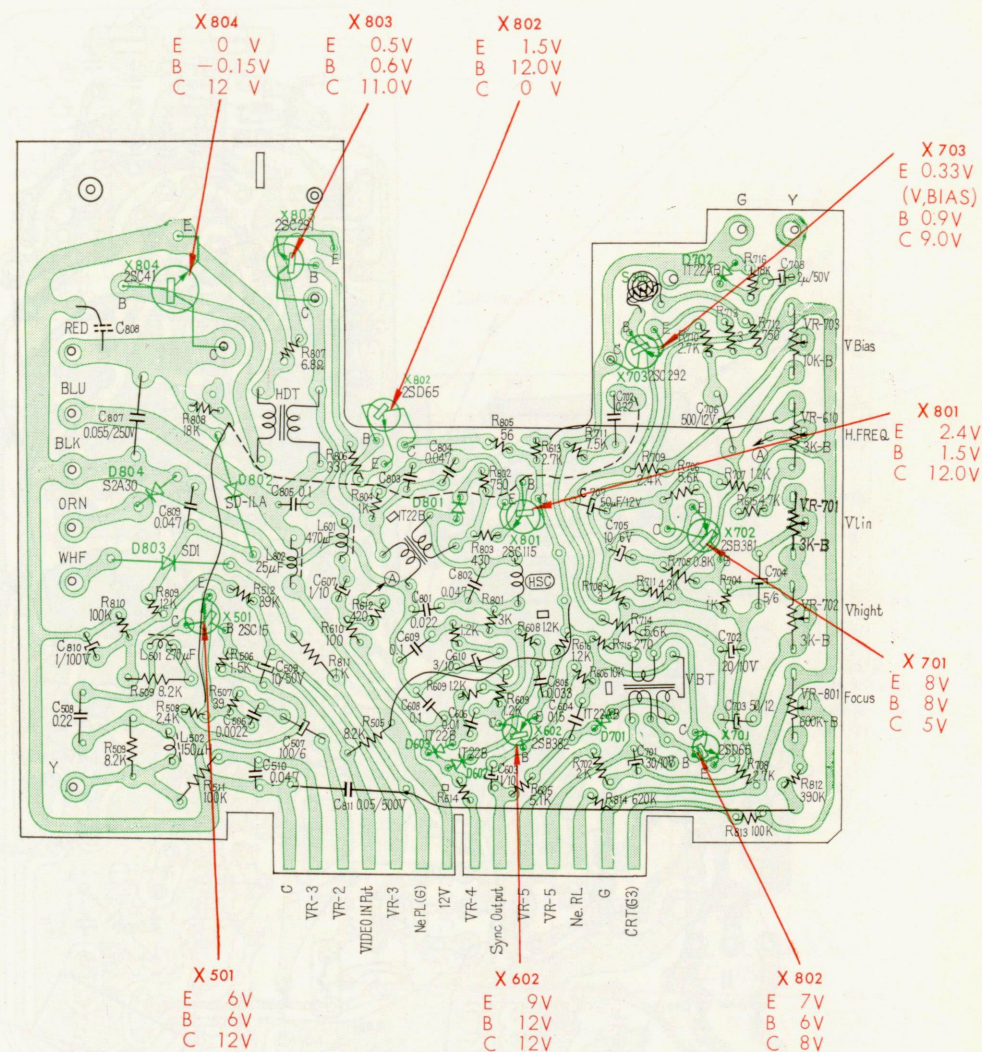
* Measured with Circuit Tester (10KΩ/V)

* Measured from ground to points indicated

Note

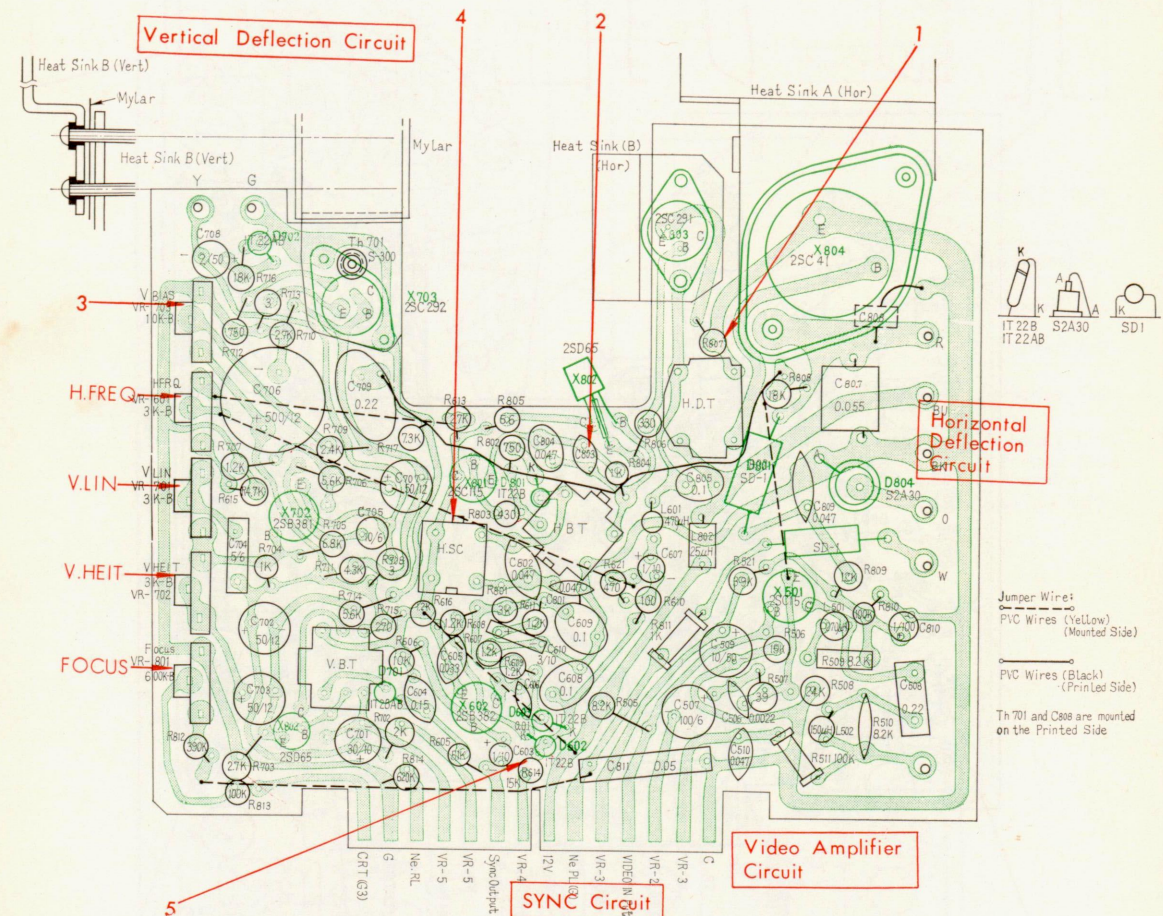
AGC Circuit including X304 and X305 is not operated in the measurement

— Deflection Circuit Board —

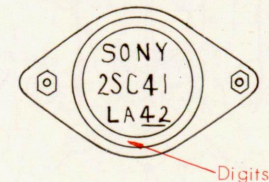


— 16 —

Vertical Deflection Circuit



The last two digits on the top of the Transistor (2SC41) indicate correct Horizontal Drive Current as shown below.



Digits	Hor. Drive Current
42	85 mA
32.22	100 mA

Adjustment

1. Ic of X803
2. Pulse Width
3. Vert, Bias Current
- 4.
5. Hor. hold variable range

Adjusting Parts

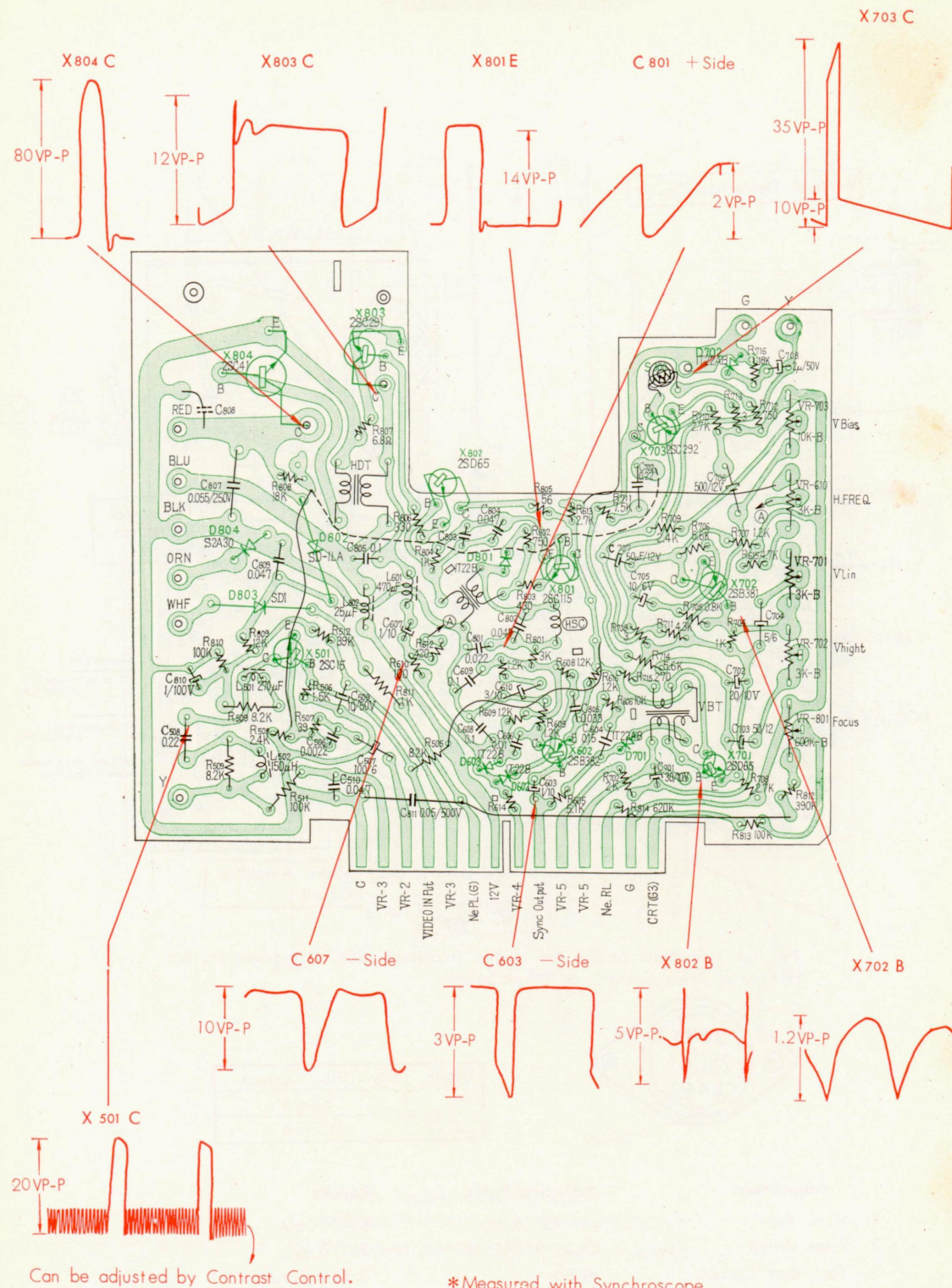
R 807 (2-15 Ω)
C 803, 0-0.033 μ F
VR 703
HSC

R614(12-27)

Results

85-100mA
10-13 μ S
0.33V across R713
Stable picture in either
case where HSC is
shorted or normal.
Number of diagonal
bars (10-14 lines)

Waveform Measurement

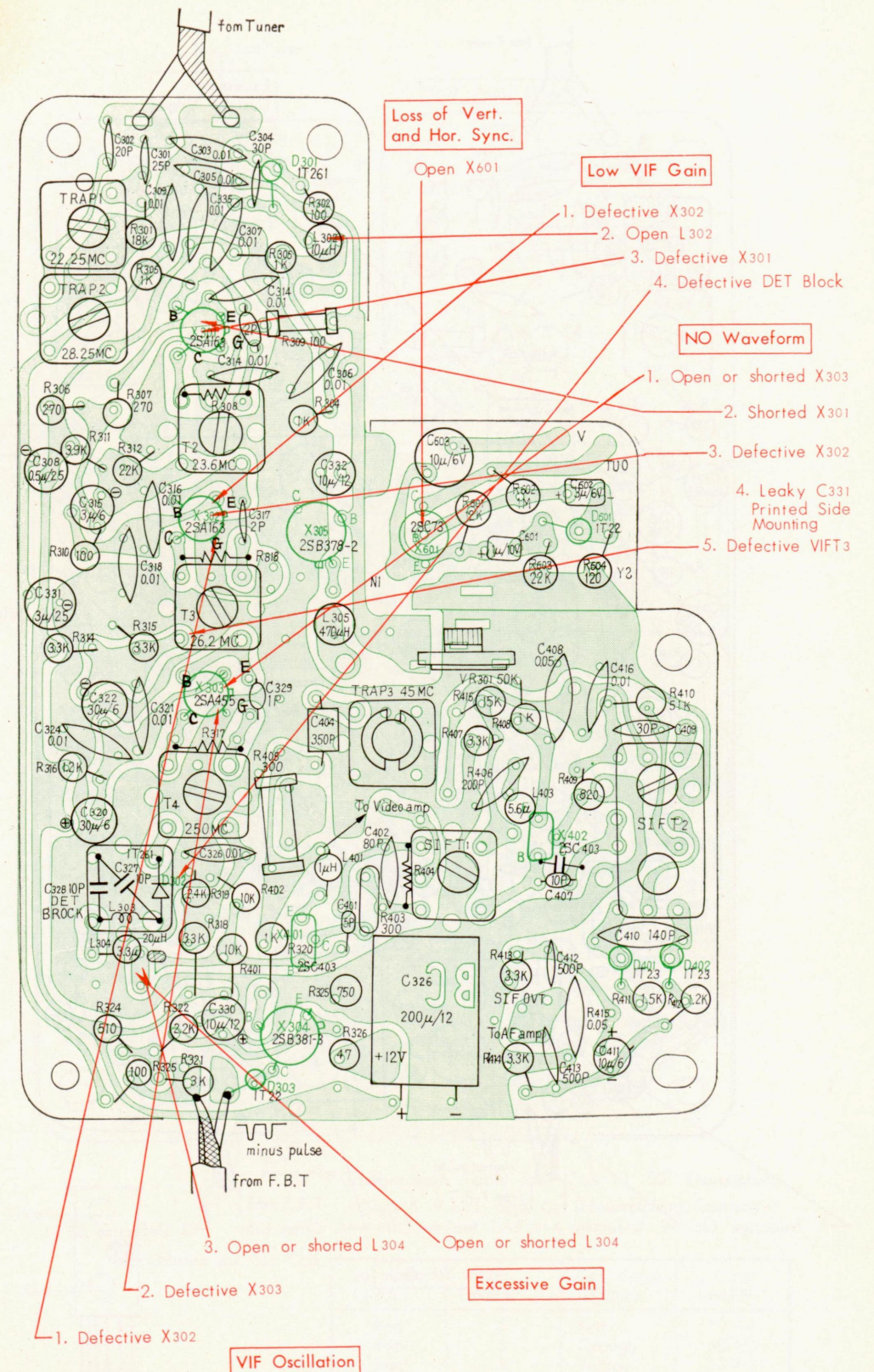


*Measured with Synchroscope

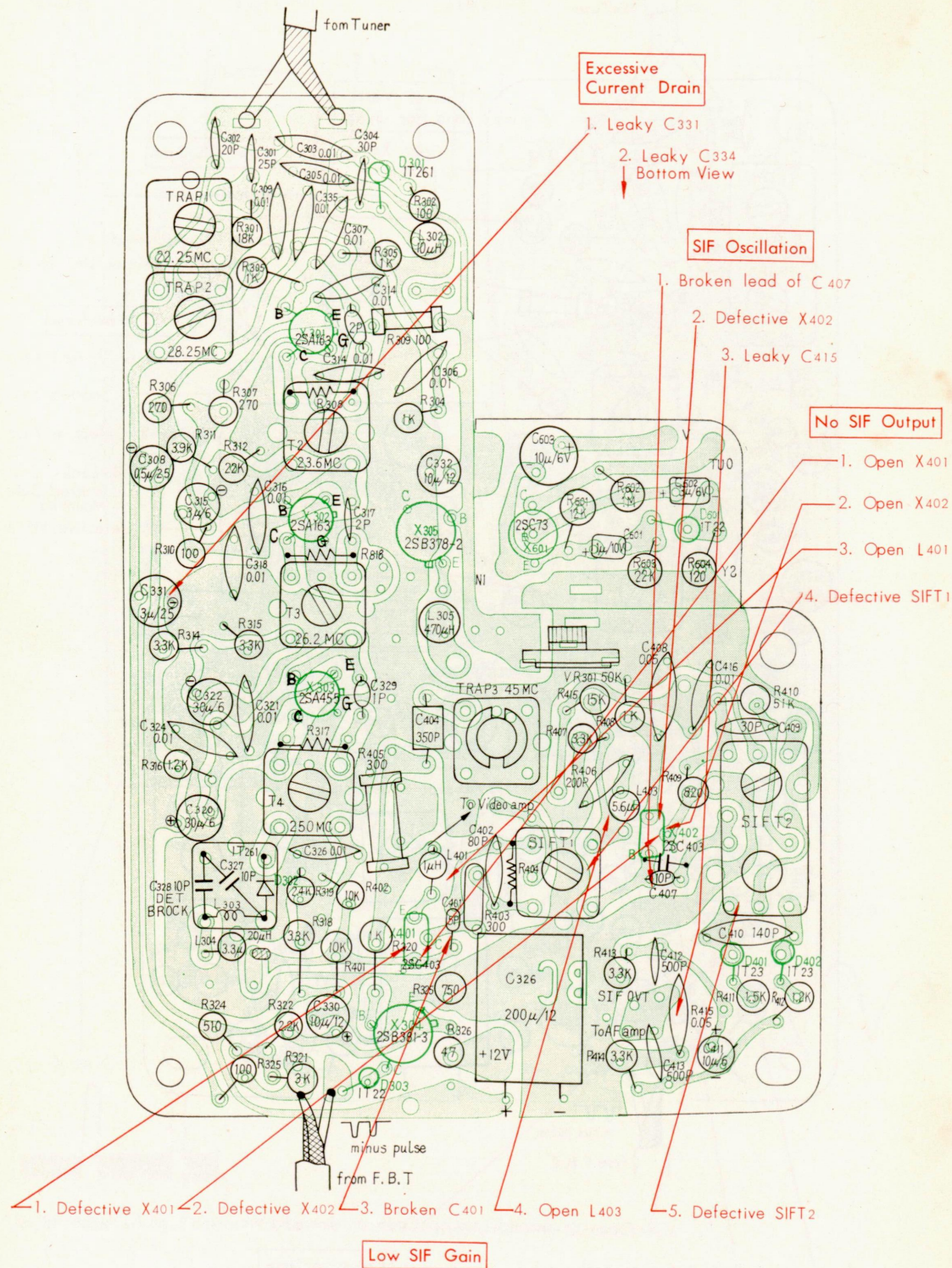
A: Anode
E: Emitter
B: Base
C: Collector

Trouble Shooting

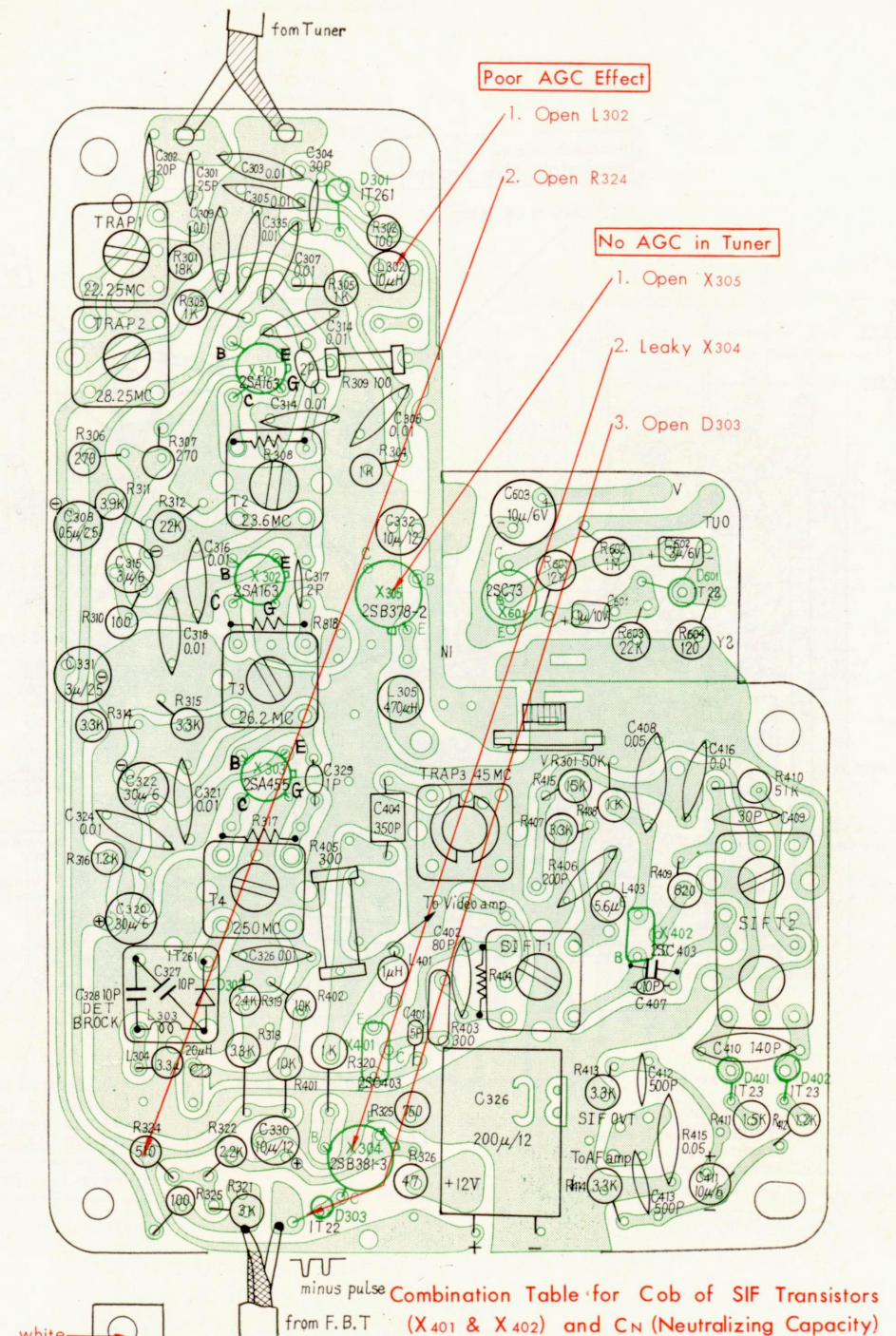
—VIF Circuit—



—SIF Circuit—

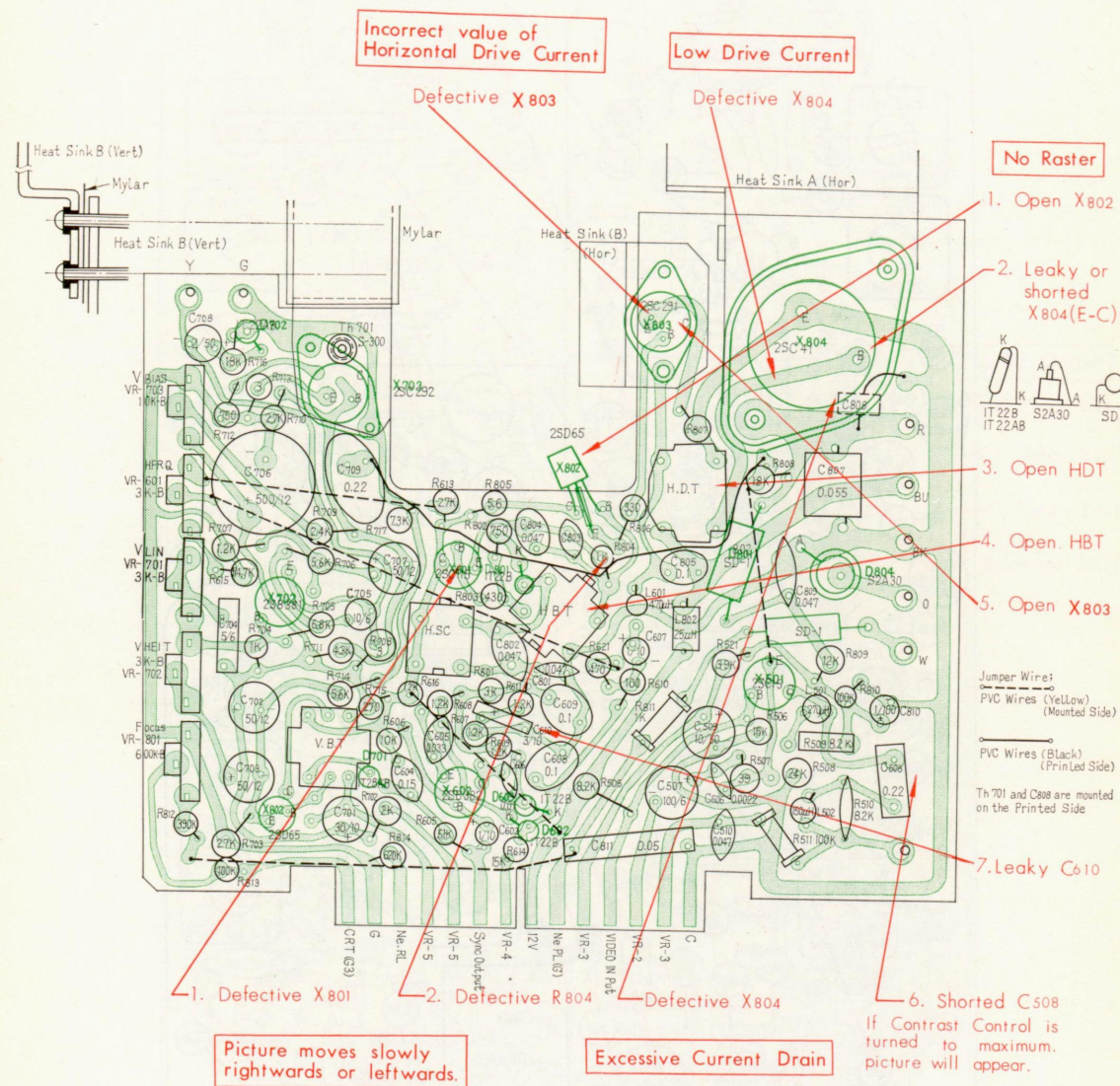


—AGC Circuit—

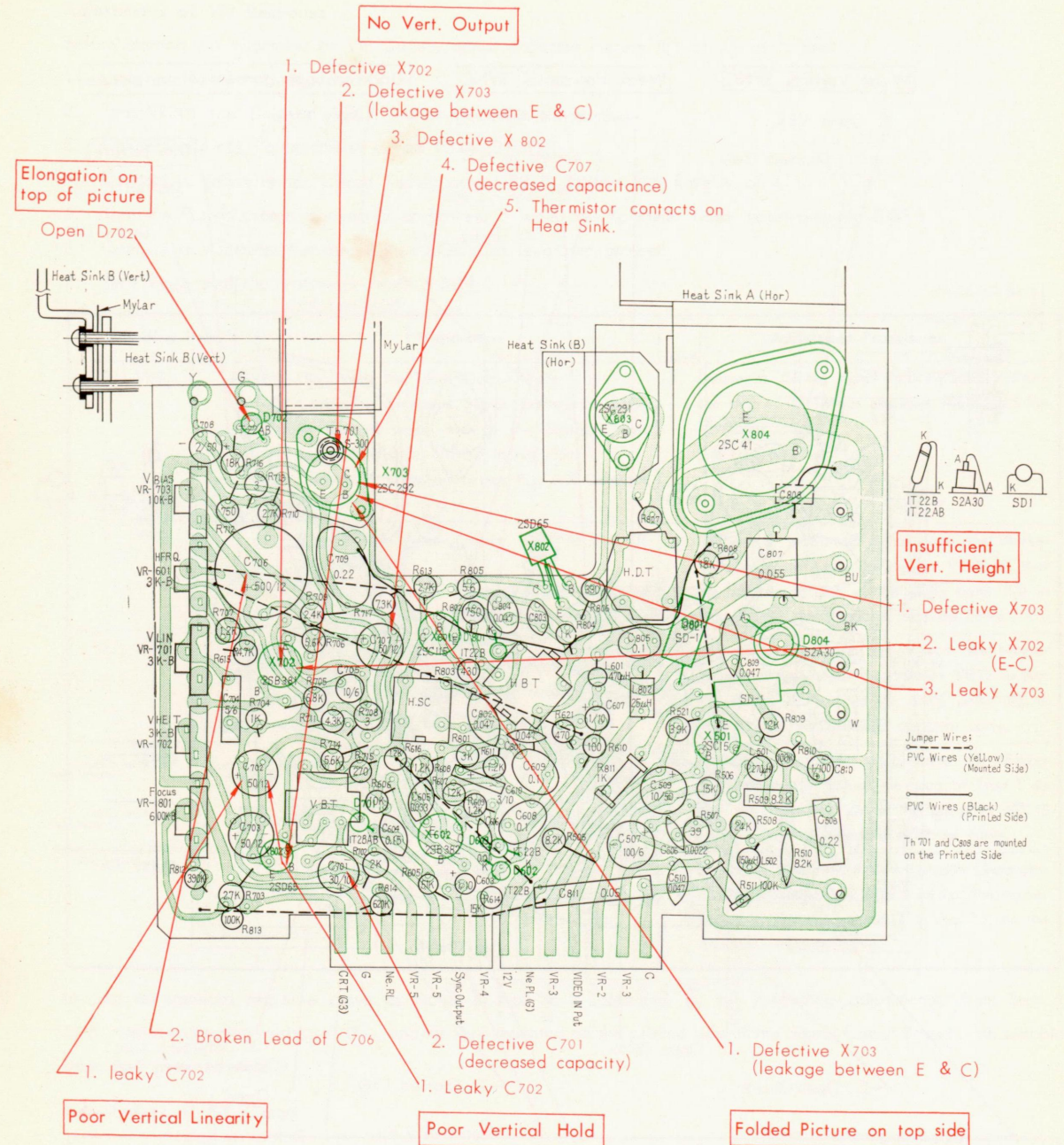


Dot Color (X401)	C401 (mmfd)	Dot Color (X402)	C407 (mmfd)
Red	5	Red	9+1
Red	5	Orange	10+1
Red	5	Yellow	10+1
Brown	5	Red	9+1
Brown	5	Orange	10+1

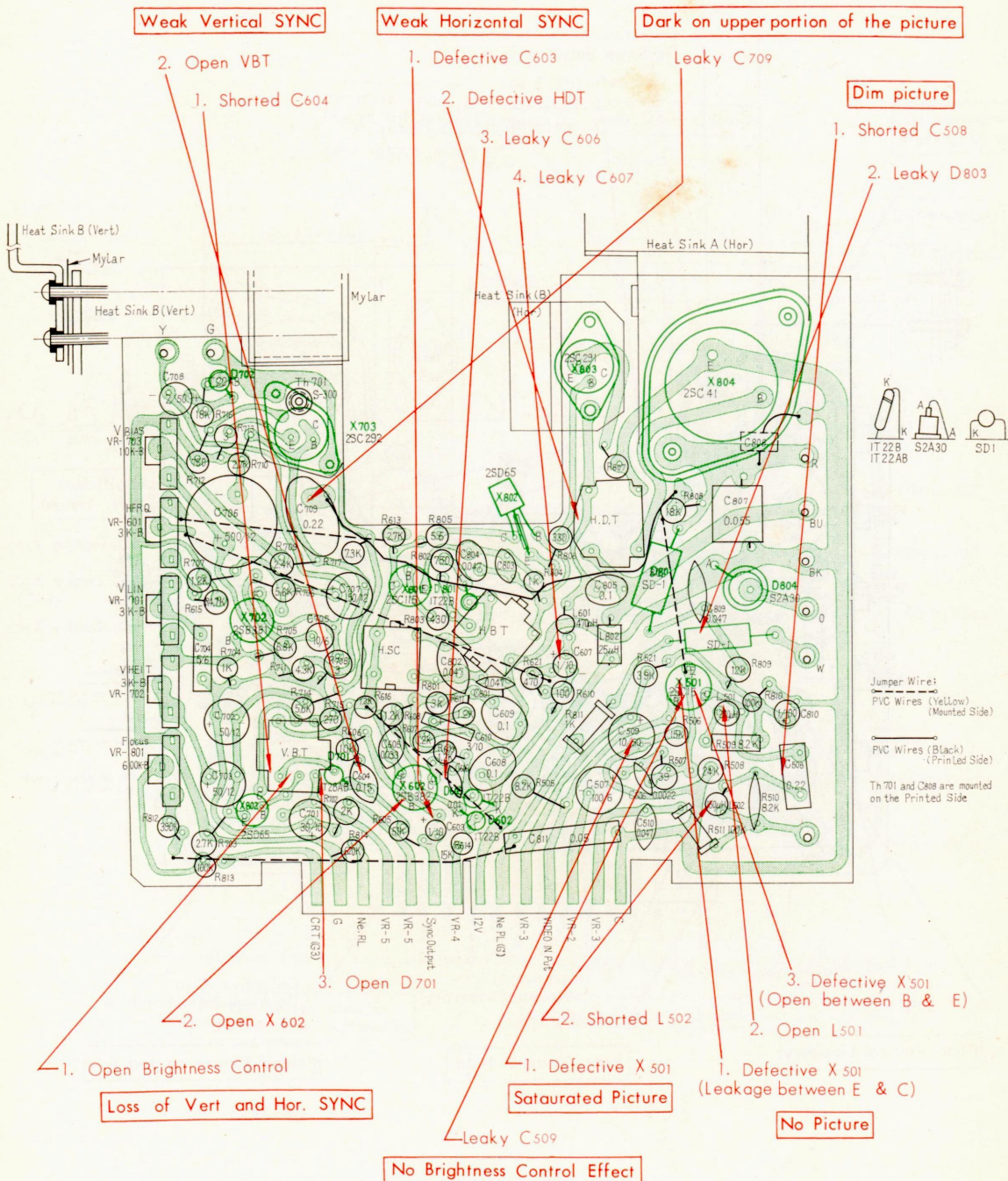
—Horizontal Deflection Circuit—



—Vertical Deflection Circuit—



—SYNC and Other Circuits—



Trouble Shooting Chart

RASTER

Symptom	Checking Procedure	Probable Cause*
1. No Raster and No Sound	Check resistance between B+ and Ground. No Resistance Approx. 300 Ω Replace the Deflection Circuit Board with a new one.	Power Supply Shortcircuit between any two of B+ lines in the Circuit Boards.
2. No Raster	Neon Lamp is not lit on. Neon Lamp is lit on. Heater of the Picture Tube is lit. Heater of the Picture Tube is not lit. Turn the BRT Knob Raster size does not change. Raster size changes.	High Voltage Block Deflection Circuit Board ① X ₈₀₁ , X ₈₀₄ , D ₈₀₁ , HDT ② HBT, HSC, R ₈₀₇ ③ C ₆₀₉ , D ₈₀₃ , C ₆₀₄ Poor contact of Multi-Jack 1. High Voltage Block 2. Picture Tube 3. Cathode Circuit 1. Picture Tube 2. Picture Tube Socket Picture Tube High Voltage Block Deflection Circuit Board ① D ₈₀₃ , VR ₃ ① C ₅₀₄ High Voltage Block
3. Dim Raster	Raster Form is normal. Elongation on left side of Raster. Replace the Deflection Circuit Board with a new one.	Deflection Yoke Deflection Circuit Board ① X ₇₀₁ , X ₇₀₃ , VBT ① or ② C ₇₀₇ , C ₇₀₅ , C ₇₀₁ , C ₇₀₂ , C ₇₁₃
4. Single Horizontal Stripe on Raster	Replace the Deflection Circuit Board with a new one. The Stripe still appears. The Stripe disappears.	Deflection Circuit Board ① X ₇₀₁ , X ₇₀₃ , C ₇₀₄ ① C ₇₀₅ , C ₇₀₂ ② Vertical Bias Current
5. Vertical Shrinkage	Abnormal Oscillation Narrow Horizontal Width	Deflection Circuit Board ① HSC ① HDT or D ₈₀₁ ① C ₅₀₆ , C ₇₀₃ , C ₈₀₇ Deflection Circuit Board ① C ₅₀₆ or C ₈₀₇

DEFLECTION and SYNC

Symptom	Checking Procedure	Probable Cause*
7. No Picture and No Sound	Replace the Signal Circuit Board with a new one. No Change Normal	Tuner Signal Circuit Board ① X ₃₀₁ , X ₃₀₃ , X ₄₀₁ , DET Block C ₃₂₀ , C ₄₁₆ , C ₃₃₅ , C ₃₁₂ , C ₃₂₄ , C ₃₁₄ ② TRAP ₁₋₂ , VIFT ₂₋₄ ② R ₃₁₆ , R ₃₀₆ , R ₃₁₀
8. No Picture	Replace the Deflection Circuit Board with a new one. No Change Normal	Deflection Circuit Board ① X ₅₀₁ , C ₅₀₇ or D ₅₀₂ ② C ₅₀₈
9. Low Contrast	Replace the Deflection Circuit Board with a new one. No Change Normal	Signal Circuit Board ① X ₃₀₁ , X ₃₀₃ , X ₄₀₁ , C ₃₂₀ , C ₄₁₆ , C ₃₃₅ , C ₃₁₂ , C ₃₂₄ , C ₃₁₄ TRAP ₁₋₂ , VIFT ₂₋₄ DET Block, AGC Circuit
10. Saturated Picture	Replace the Deflection Circuit Board with a new one. No Change Normal	Deflection Circuit Board ① X ₁₃ , C ₃₀₄ , R ₃₁₄ , D ₃₀₂ , C ₆₀₉
11. Loss of Synchronization	Replace the Deflection Circuit Board with a new one. No Change Normal	Signal Circuit Board ① X ₃₀₄ , X ₃₀₅ , R ₄₀₂ ① X ₄₀₁ , D ₃₀₂ , D ₃₀₃ or DET Block Deflection Circuit Board ① X ₅₀₁ or D ₅₀₂ ② R ₅₀₅ SYNC Circuit Board ① X ₆₀₁ ② R ₆₀₁ Deflection Circuit Board ① C ₆₀₄ , C ₆₀₃ , C ₆₀₉ ② VBT D ₆₀₃ , R ₆₀₃ , L ₆₀₁ , HBT ③ X ₈₀₁ , HBT

SOUND

Symptom	Checking Procedure	Probable Cause*
12. No Sound	Listen with a Earphone. Sound is heard through the Earphone. No sound is heard.	Earphone Jack (breakage of leads) Speaker (breakage of Voice Coil) Sound Circuit Board Short Circuit of Shielding Wire ① X ₅₅₁ , X ₅₅₄ , C ₅₅₁ ① C ₅₅₄
13. Weak Sound	Cannot be improved by turning the Fine Tuning Knob. Replace the Signal Circuit Board with a new one.	Signal Circuit Board ① X ₄₀₁ , X ₄₀₂ SIFT ₁₋₂ ② S ₄₁₁ or C ₄₁₅
14. Distorted Sound	Listen with a Earphone. Normal Still distorted	Tuner Sound Circuit Board ① C ₅₅₄ , X ₅₅₁ ~X ₅₅₄ Signal Signal Circuit Board ① X ₄₀₁ , X ₄₀₂ , D ₄₀₁ , D ₄₀₂ ② R ₄₀₂ ③ SIF
15. Buzz	Listen with a Earphone. Normal Still distorted	Speaker Sound Circuit Board ① X ₅₅₃ , X ₅₅₄ , X ₅₅₂ , C ₅₅₂ Signal Circuit Board ① D ₄₀₁ , D ₄₀₂ , C ₄₁₁ ② Sec. of SIFT ₂ Signal Circuit Board ① C ₄₁₀ ① D ₄₀₁ , D ₄₀₂ ② Sec. of SIFT ₂

* The cause of trouble may probably be in any of the listed circuits.

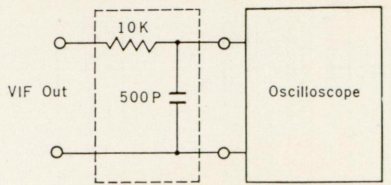
① Defective ② Open ③ Shorted ④ Leaky ⑤ Maladjusted

Adjustment Procedure

Adjustments of VIF Response

Before starting the alignment of VIF Circuit, adjust collector current (Ic) of X1 as follows.

1. Unsolder lead for keying pulse.
2. Turn VR301 (for Delayed AGC) counter-clockwise to the full.
3. Connect a 5 k Ω Potentiometer across R324 (310 Ω).
4. Connect a Voltmeter (or Circuit Tester) across R307 (Emitter Bias Resistor of X1).
5. Turn the Potentiometer, connected at process 3, until the Voltmeter reads approximately 0.05 V.
6. Connect a Voltmeter between Tuner AGC Out lead and ground.
7. Turn VR301 until the Voltmeter reads 5.3V \pm 0.1V.

Adjusting Item	Preparation	Adjustment Procedures
1. VIFT ₄	(1) Disconnect the Tuner Output leads. (2) Connect a Standard Signal Generator (SSG) to the VIF Input Pins on the Signal Circuit Board (INPUT to VIDEO in Fig. 39). (3) Connect a Voltmeter across R ₄₀₂ (VIF Detector Out).	1. Deliver a 25 Mc signal from the SSG and turn the slug of VIFT ₄ for maximum reading on the Voltmeter.
2. VIFT ₂	(1) Connect the Tuner Output leads to the VIF Input Pin Jacks. (2) Connect a Sweep Generator and a Marker Generator to the T.P. (Test Point) of the Tuner through a 0.01 μ F Capacitor.	2. Deliver a 23.68 Mc signal from the Marker Generator and adjust the slug of VIFT ₂ so that the marker is just at the 40% point (A) in Fig. 38) of the standard response curve.
3. VIFT ₃	(3) Connect an Oscilloscope across R ₄₀₂ (VIF Detector Out) through a noise filter as specified below.	3. Deliver a 26.75 Mc signal from the Marker Generator and adjust the slug of VIFT ₃ so that the marker is just at the 65% point (B) in Fig. 38) on the standard response curve.
4. TRAP1		4. Deliver a 22.25 Mc signal from the Marker Generator and adjust the slug of Trap 1 so that the marker is just at the dip point (C) in Fig. 38) on the standard response curve.
5. TRAP2		5. Deliver a 28.25 Mc from the Marker Generator and adjust the slug of Trap 2 so that the marker is just at the dip point (D) in Fig. 38) on the standard response curve.

In case no standard response curve as shown in Fig. 38 is obtained by the preceding adjustments, from Step 1 to 5, replace damping resistor(s) (R₃₁₈ and/or R₃₁₃) mounted on the printed side of the Signal Circuit Board, with suitable ones for optimum result.

Adjustments of SIF Circuit

Adjusting Item	Preparation	Adjustment Procedures
1. TRAP 3	(1) Set the Brightness Control to the proper position and PIX Control to maximum. (2) Disconnect the Tuner Output leads. (3) Connect a Test Oscillator to the Video Detector Output and deliver a 4.5 Mc signal. The 4.5 Mc stripes will appear on the Picture Tube.	1. Adjust the slug of TRAP3 so that the 4.5 Mc stripes disappear from the Picture Tube.
2. SIFT ₁ and Primary of SIFT ₂	(1) Disconnect the Tuner Output leads. (2) Connect a Test Oscillator to the Video Detector Output Terminal. (3) Connect a Voltmeter across R ₄₁₃ .	2. Deliver a 4.5 Mc signal from the Test Oscillator and adjust the slug of SIFT ₁ and pink slug of SIFT ₂ (primary) for maximum reading on the Voltmeter.

Adjusting Item	Preparation	Adjustment Procedures
3. Secondary of SIFT ₂	(1) Disconnect the Tuner Output leads. (2) Connect a Sweep Generator and a SSG to the Video Detector Output Terminal. (3) Connect an Oscilloscope. (4) Connect a 5K Ω resistor across C ₄₁₅ .	3. Deliver a 4.5 Mc signal (Amplitude modulated) from the SSG and set the Sweep Generator on. S curve will appear on the Oscilloscope. Adjust the blue slug of SIFT ₂ (secondary) for obtaining minimum modulated waveform.

Note: 1. The above-mentioned adjustments should be repeated until optimum results are obtained.
2. If S curve is not symmetrical with respect to the intersection of the S curve and the return line, adjust the primary slug (pink) of the SIFT₂ to obtain optimum S curve. (See Fig. 40)

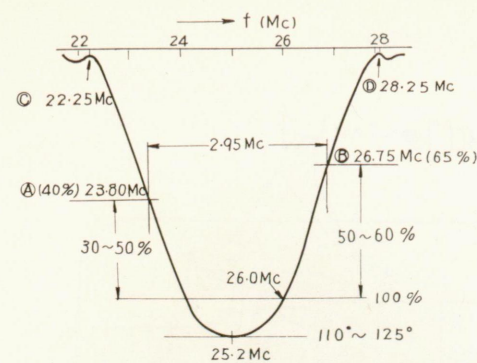
Adjustment of Deflection Circuit

Adjusting Item	Preparation	Adjustment Procedures
1. 50 V line	(1) Adjust the Horizontal and the Vertical Control Knobs until picture is in sync. (2) Connect a Voltmeter between the positive side of C ₈₀₉ and ground.	1. Voltmeter must indicate range between 50 V and 51 V. If not, replace R ₈₀₄ (5k Ω -18K Ω) with a suitable one for the correct reading on the Voltmeter.
2. Collector current of X ₅₀₁ (VD OUT)	(1) Set the Tuner to a free channel. (any channel free from broadcasting programs). (2) Check 12 V and 50 V Power Supply. (3) Connect a Voltmeter across R ₅₀₉ .	2. The Voltmeter must indicate approximately 20 V. If not, replace R ₅₀₅ (8.2K Ω -15k Ω) with a suitable one for 20V reading on the Voltmeter.
3. Collector current of X ₇₀₃ (VER OUT)	(1) Set the Horizontal and the Vertical Control Knobs to complete synchronization. (2) Check 12 V Power Supply. (3) Connect a Voltmeter across R ₇₀₃ (Emitter Resistor of X ₇₀₃).	3. Turn the Vertical Bias Control (VR ₇₀₃) so that the Voltmeter indicates approximately 0.33 V.
4. Vertical Height and Vertical Linearity	(1) Receive a Test Pattern. (2) Check 12 V Power Supply.	4. Adjust VR ₇₀₁ and VR ₇₀₂ for the optimum linearity and height.
5. Pulse Width	(1) Adjust the Horizontal and the Vertical Control Knobs until picture is in sync. (2) Short out the Horizontal Stabilizer Coil. (3) Connect an Oscilloscope to the emitter of X ₈₀₁ .	5. Correct value for pulse width is 10 ~ 12 μ sec. If not, replace C ₈₀₃ (0 ~ 0.03 μ F) with a suitable one for the correct pulse width.
6. H. S. C. (Horizontal Stabilizer Coil)	(1) Short out the HSC terminals tentatively. (2) Set the Horizontal and the Vertical Control Knobs to complete synchronization.	6. Open the HSC terminals. (normal) Turn the slug of the HSC for most stable picture in either case where HSC is shorted or normal.

Note: As the adjustments, 5. and 6., have influence on each other, they must be performed by turns repeatedly for optimum results.

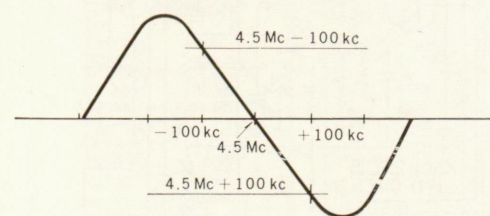
Adjusting Item	Preparation	Adjustment Procedures
7. I Σ of X ₈₀₃ (R ₈₀₇)	(1) Adjust the Horizontal and the Vertical Hold Control Knobs until picture is in sync. (2) Connect a Voltmeter across S ₈₀₆ .	7. Select a proper resistance value for R ₈₀₇ (2 Ω ~15 Ω) so that the Emitter Current (I Σ) of X ₈₀₃ is approximately 100mA.
8. Horizontal Frequency (VR ₈₀₁)	(1) Set the Contrast and the Brightness Control Knobs to the optimum positions.	8. Adjust VR ₈₀₁ so that the numbers of diagonal bars are the same for both extreme clockwise and counter-clockwise settings of VR ₄ .
9. Focus	(1) Adjust the Horizontal and the Vertical Hold Control Knobs until picture is in sync. (2) Set the Contrast and the Brightness Control Knobs to the optimum positions.	9. Adjust VR ₈₀₁ for best focus.

IF Response Curve

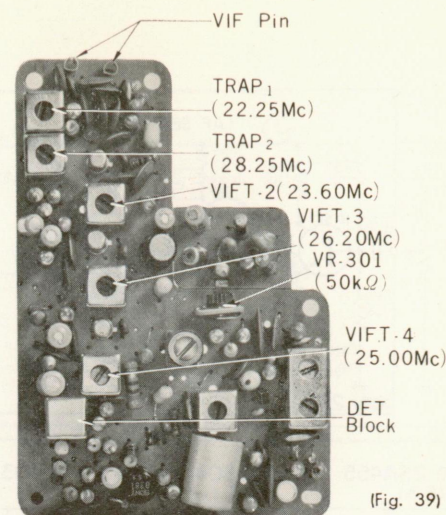


(Fig. 38)

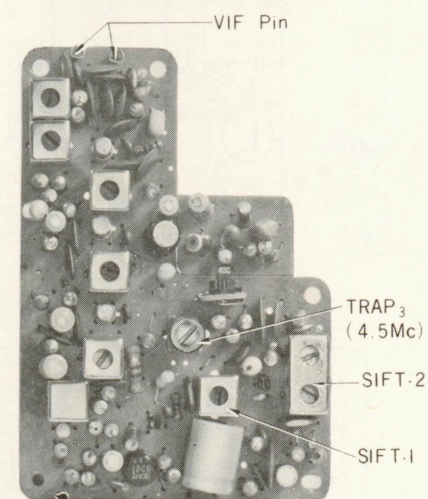
Standard S Curve



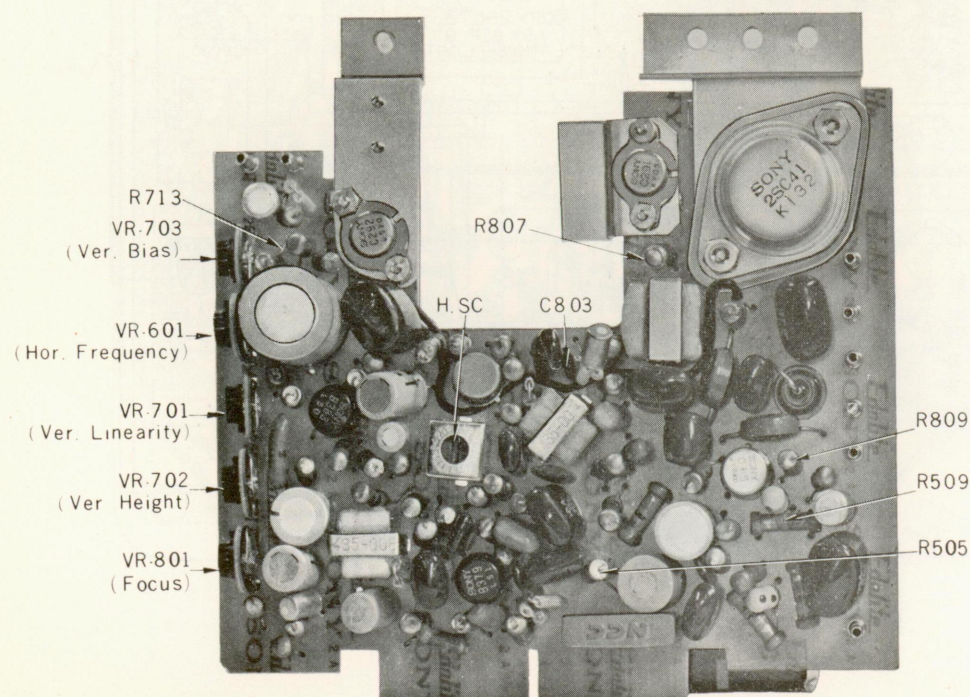
(Fig. 40)



(Fig. 39)



(Fig. 41)

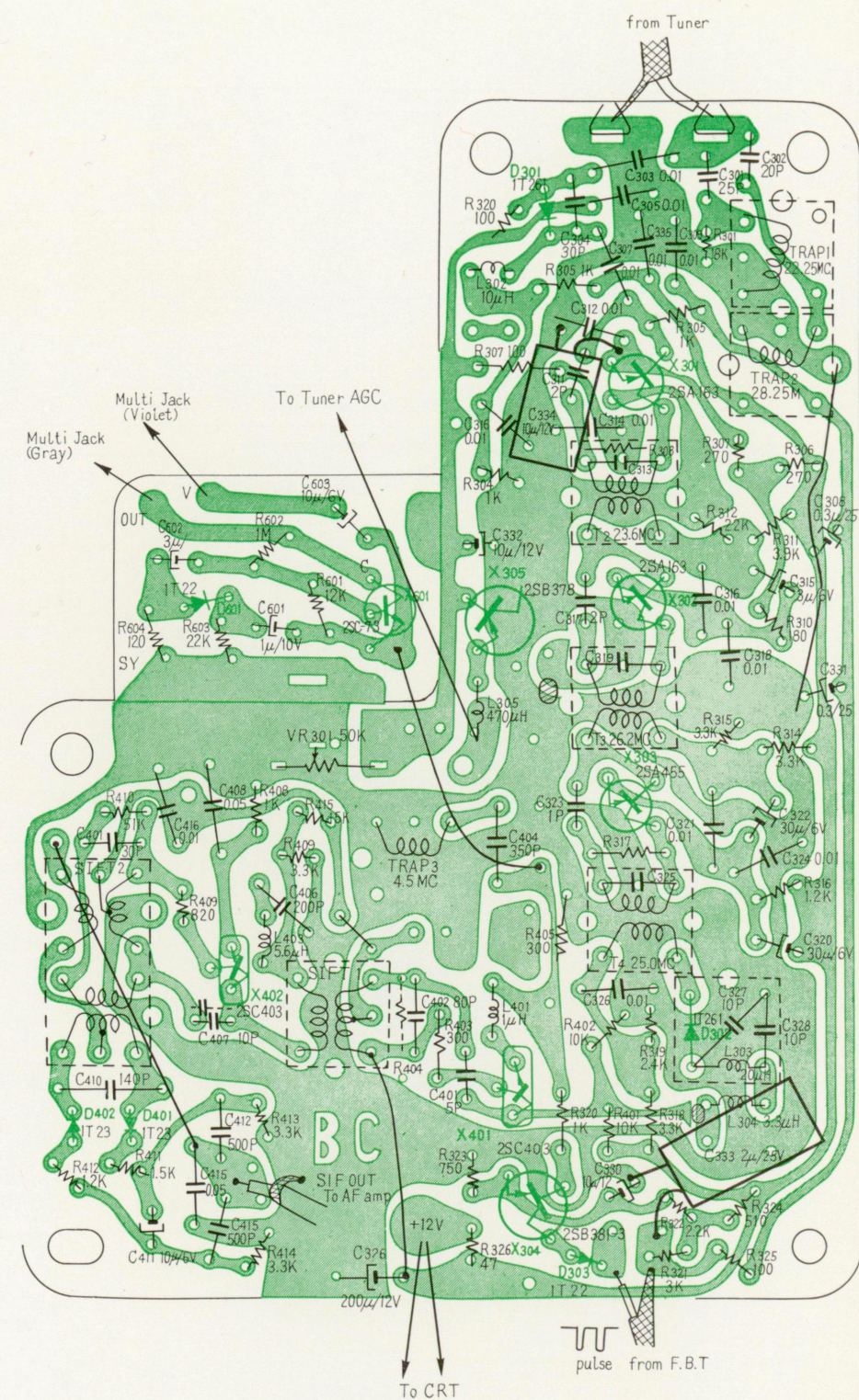


(Fig. 42)

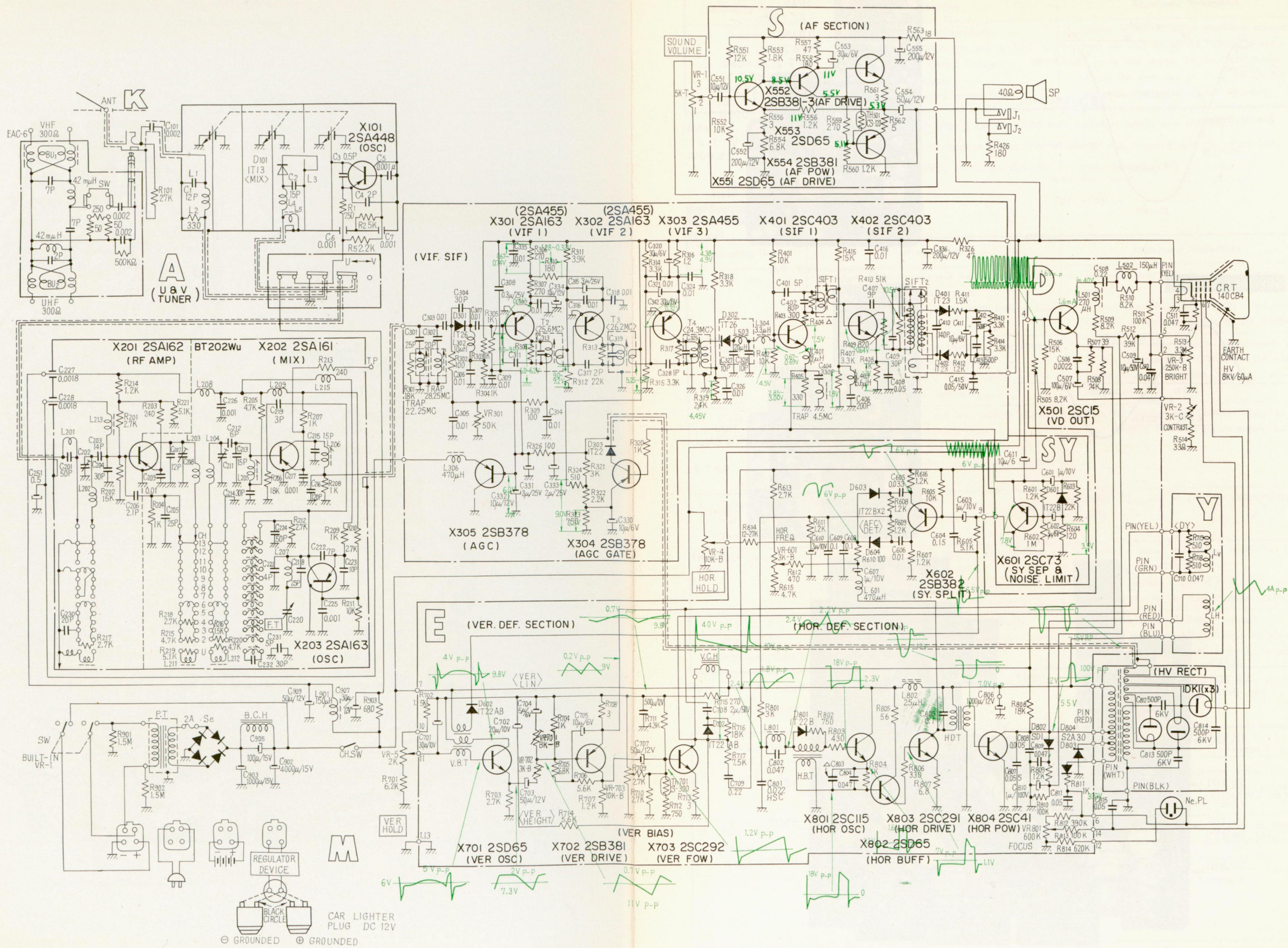
Mounting Diagram

—Printed Side—

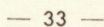
Signal Circuit Board



Schematic Diagram

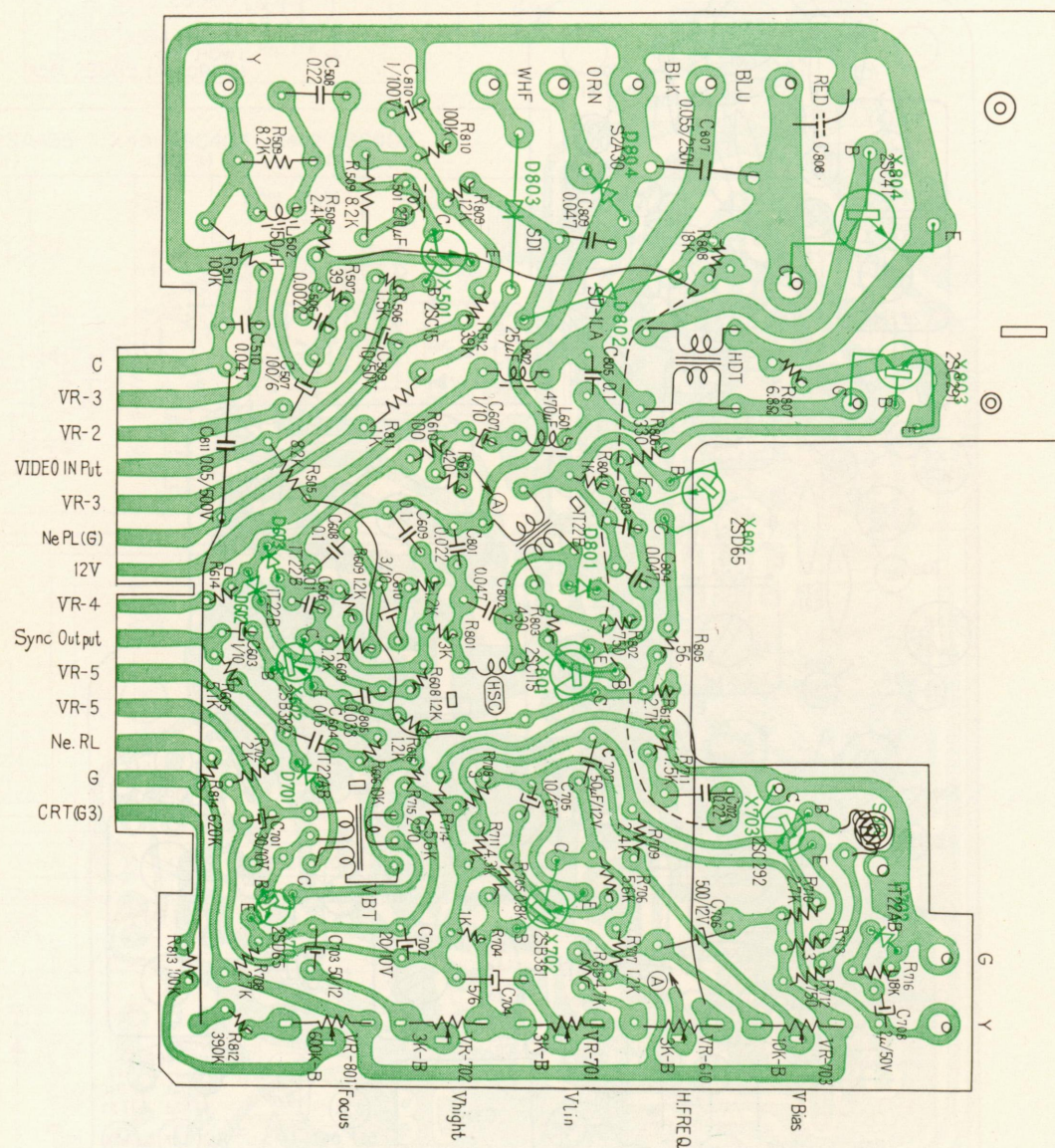


—Mounted Side—
Signal Circuit Board

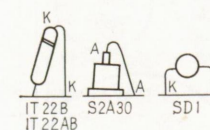
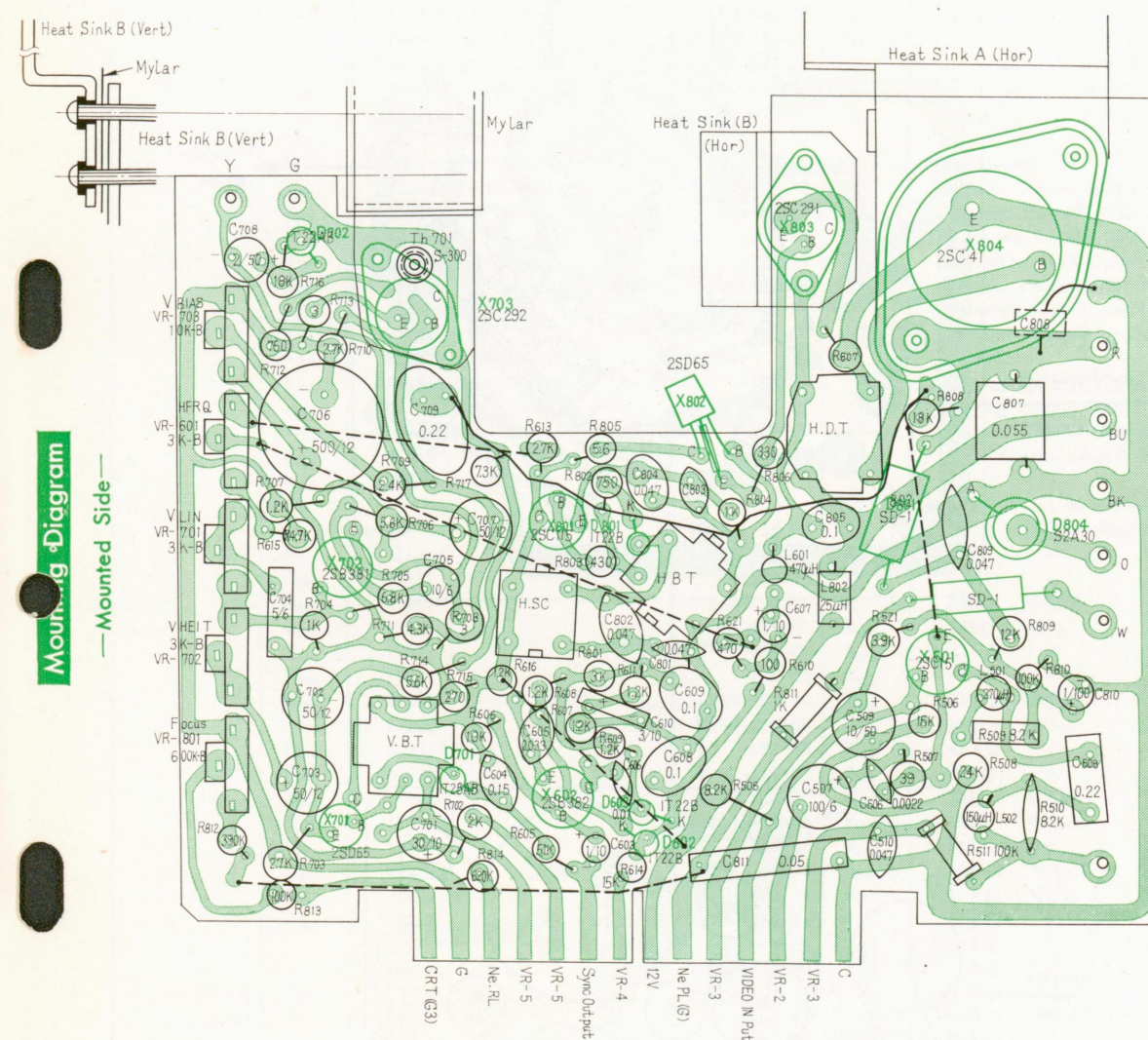


—Printed Side —

Deflection Circuit Board



—Mounted Side—
Deflection Circuit Board

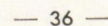


Jumper Wire;
PVC Wires (Yellow)
(Mounted Side)

PVC Wires (Black)
(Printed Side)

Th 701 and C808 are mounted
on the Printed Side

—Printed Side—



— 37 —

—continued—

Part No.	Symbol	Description	Part No.	Symbol	Description
1-203-387-11	R ₃₁₂	22K Ω RD $\frac{1}{8}$ RL Carbon $\pm 50\%$	1-203-405-00	R ₇₀₂	1.5K Ω RD $\frac{1}{8}$ RL Carbon
-192-11	*R ₃₁₃	15K Ω RD $\frac{1}{16}$ L "	-372-00	R ₇₀₃	2.7K Ω " "
-373-11	R ₃₁₄	3.3K Ω RD $\frac{1}{8}$ RL "	-367-00	R ₇₀₄	1K Ω " "
-373-11	R ₃₁₅	3.3K Ω " "	-381-00	R ₇₀₅	6.8K Ω " "
-368-11	R ₃₁₆	1.2K Ω RD $\frac{1}{8}$ RL Carbon	-378-00	R ₇₀₆	5.6K Ω " "
-373-11	R ₃₁₈	3.3K Ω " "	-368-00	R ₇₀₇	1.2K Ω " "
-778-11	R ₃₁₉	2.4K Ω " "	1-207-018-00	R ₇₀₈	3 Ω RD $\frac{1}{4}$ L Wire Wound Resistor
-367-11	*R ₃₂₀	1K Ω " "	1-203-778-00	R ₇₀₉	2.4K Ω RD $\frac{1}{8}$ RL Carbon
-443-11	*R ₃₂₁	3K Ω " "	-372-00	R ₇₁₀	2.7K Ω " "
-370-11	*R ₃₂₂	2.2K Ω " "	-375-00	R ₇₁₁	4.3K Ω " "
-335-11	*R ₃₂₃	750 Ω " "	-335-00	R ₇₁₂	750 Ω " "
-316-11	*R ₃₂₄	510 Ω " "	1-207-018-00	R ₇₁₃	3 Ω RW $\frac{1}{4}$ RL Wire Wound Resistor
-357-11	*R ₃₂₅	100 Ω " "			
-414-11	*R ₃₂₆	47 Ω " "	1-203-378-00	R ₇₁₄	5.6K Ω RD $\frac{1}{8}$ RL Carbon
-383-11	R ₄₀₁	10K Ω " "	-359-00	R ₇₁₅	270 Ω " "
-383-11	R ₄₀₂	10K Ω " "	-378-00	R ₇₁₆	5.6K Ω " "
-222-11	R ₄₀₃	300 Ω RD $\frac{1}{16}$ L "	-382-00	R ₇₁₇	7.5K Ω " "
-192-11	R ₄₀₄	15K Ω " "	-316-00	R ₇₁₈	510 Ω " "
-024-11	R ₄₀₅	330 Ω RD $\frac{1}{4}$ L "	-316-00	R ₇₁₉	510 Ω " "
-373-11	R ₄₀₇	3.3K Ω RD $\frac{1}{8}$ RL "	-443-00	R ₈₀₁	3.0K Ω " "
-367-11	R ₄₀₈	1K Ω " "	-335-00	R ₈₀₂	750 Ω " "
-366-11	R ₄₀₉	820 Ω " "	-760-00	R ₈₀₃	430 Ω " "
-392-11	R ₄₁₀	51K Ω " "	-367-00	R ₈₀₄	1K Ω " "
-405-11	R ₄₁₁	1.5K Ω " "	-832-00	R ₈₀₅	56 Ω " "
-368-11	R ₄₁₂	1.2K Ω " "	-360-00	R ₈₀₆	330 Ω " "
-385-11	R ₄₁₅	15K Ω " "	1-207-018-00	*R ₈₀₇	3 Ω RD $\frac{1}{4}$ L Wire Wound Resistor
-334-00	R ₄₂₆	180 Ω RD $\frac{1}{4}$ L "	1-203-386-00	R ₈₀₈	18K Ω RD $\frac{1}{8}$ RL Carbon
-384-00	*R ₅₀₅	12K Ω RD $\frac{1}{8}$ RL "	-384-00	R ₈₀₉	12K Ω " "
-385-00	R ₅₀₆	15K Ω " "	-399-00	R ₈₁₀	100K Ω " "
-467-00	R ₅₀₇	39 Ω " "	-031-00	R ₈₁₁	1K Ω RD $\frac{1}{4}$ L "
-778-00	R ₅₀₈	2.4K Ω " "	-867-00	R ₈₁₂	390K Ω RD $\frac{1}{8}$ RL "
-068-00	R ₅₀₉	8.2K Ω RD $\frac{1}{4}$ L "	-399-00	R ₈₁₃	100K Ω " "
-068-00	R ₅₁₀	8.2K Ω " "	-868-00	R ₈₁₄	620K Ω " "
-100-00	R ₅₁₁	100K Ω " "	1-201-455-00	R ₉₀₁	1.5M Ω RD $\frac{1}{2}$ L Solid
-407-00	R ₅₁₂	39K Ω RD $\frac{1}{8}$ RL "	-455-00	R ₉₀₂	1.5M Ω " "
1-201-596-00	R ₅₁₃	3.3M Ω RC $\frac{1}{2}$ L Composition	1-203-157-00	R ₉₀₃	680 Ω RD $\frac{1}{4}$ L Carbon
-128-00	R ₅₁₄	33 Ω RC $\frac{1}{8}$ RL "			
1-203-384-00	R ₅₅₁	12K Ω RD $\frac{1}{8}$ RL Carbon			
-383-00	R ₅₅₂	10K Ω " "	1-101-002-11	C ₁₀₁	0.002 μ F Ceramic
-369-00	R ₅₅₃	1.8K Ω " "	-722-11	C ₃₀₁	25PF "
-381-00	R ₅₅₄	6.8K Ω " "	-111-18	C ₃₀₂	20PF "
-704-00	R ₅₅₅	3 Ω " "	-004-11	C ₃₀₃	0.01 μ F "
-368-00	R ₅₅₆	1.2K Ω " "	-115-19	C ₃₀₄	30PF "
-414-00	R ₅₅₇	47 Ω " "	-004-11	C ₃₀₅	0.01 μ F "
-831-00	R ₅₅₈	180 Ω " "	-004-11	C ₃₀₆	0.01 μ F "
-357-00	R ₅₅₉	270 Ω " "	-004-11	C ₃₀₇	0.01 μ F "
-704-00	R ₅₆₁	3 Ω " "	1-121-228-11	C ₃₀₈	0.3 μ F 25WV Electrolytic
-368-00	R ₅₆₇	1.2K Ω " "	1-101-004-11	C ₃₀₉	0.01 μ F Ceramic
-384-00	R ₆₀₁	12K Ω " "	-010-11	C ₃₁₁	2PF "
-495-11	R ₆₀₂	1M Ω " "	-004-11	C ₃₁₂	0.01 μ F "
-387-00	R ₆₀₃	22K Ω " "	-004-11	C ₃₁₄	0.01 μ F "
-759-00	R ₆₀₄	120 Ω " "	1-121-178-11	C ₃₁₅	3 μ F 25WV Electrolytic
-377-00	R ₆₀₅	5.1K Ω " "	1-101-004-11	C ₃₁₆	0.01 μ F Ceramic
-368-00	R ₆₀₇	1.2K Ω " "	-010-11	C ₃₁₇	2PF "
-368-00	R ₆₀₈	1.2K Ω " "	-004-11	C ₃₁₈	0.01 μ F "
-368-00	R ₆₀₉	1.2K Ω " "	1-121-102-05	C ₃₂₀	30 μ F 6WV Electrolytic
-357-00	R ₆₁₀	100 Ω " "	1-101-004-11	C ₃₂₁	0.01 μ F Ceramic
-368-00	R ₆₁₁	1.2K Ω " "	1-121-102-05	C ₃₂₂	30 μ F 6WV Electrolytic
-561-00	R ₆₁₂	470 Ω " "	1-101-004-11	C ₃₂₄	0.01 μ F Ceramic
-372-00	R ₆₁₃	2.7K Ω " "	1-101-004-11	C ₃₂₆	0.01 μ F "
-386-00	*R ₆₁₄	18K Ω " "	-104-05	C ₃₃₀	10 μ F 6WV Electrolytic
-376-00	R ₆₁₅	4.7K Ω " "	-232-11	C ₃₃₁	3 μ F 25WV "
-368-00	R ₆₁₆	1.2K Ω " "	-118-05	C ₃₃₂	10 μ F 12WV "
-124-00	R ₇₀₁	6.2K Ω RD $\frac{1}{4}$ L "	-231-11	C ₃₃₃	2 μ F 25WV "

Capacitor (* To be adjusted)

—continued—

Part No.	Symbol	Description	Part No.	Symbol	Description
1-101-118-05	C ₃₃₄	10 μ F 12WV Electrolytic	1-127-906-00	C ₆₀₇	1 μ F 10WV Electrolytic
-004-11	C ₃₃₅	0.01 μ F Ceramic	1-105-685-12	C ₆₀₈	0.1 μ F 50WV Mylar
1-121-121-05	C ₃₃₆	200 μ F 12WV Electrolytic	-685-12	C ₆₀₉	0.1 μ F 50WV "
-012-11	C ₄₀₁	5PF Electrolytic	1-127-908-00	C ₆₁₀	3 μ F 100WV Electrolytic
-113-18	C ₄₀₂	30PF "	1-121-104-01	C ₆₁₁	10 μ F 6WV "
1-103-041-12	C ₄₀₄	330PF Polystyrol	-110-01	C ₇₀₁	30 μ F 10WV "
1-101-017-11	C ₄₀₆	200PF Ceramic	-085-11	C ₇₀₂	20 μ F 12WV "
-157-11	C ₄₀₇	1PF "	-122-01	C ₇₀₃	50 μ F 12WV "
-007-11	C ₄₀₈	0.05 μ F "	1-127-914-11	C ₇₀₄	5 μ F 6WV "
-115-19	C ₄₀₉	30PF "	-104-15	C ₇₀₅	10 μ F 6WV "
-571-11	C ₄₁₀	140PF "	1-121-219-11	C ₇₀₆	500 μ F 12WV "
1-121-104-05	C ₄₁₁	10 μ F 6WV Electrolytic	-122-01	C ₇₀₇	50 μ F 12WV "
1-101-424-15	C ₄₁₂	500PF Ceramic	-136-01	C ₇₀₈	2 μ F 50WV "
-424-15	C ₄₁₃	500PF "	1-105-677-12	C ₇₀₉	0.022 μ F 50WV Mylar
-007-11	C ₄₁₅	0.05 μ F "	-035-00	C ₇₁₀	0.05 μ F 100WV "
-004-11	C ₄₁₆	0.01 μ F "	-677-12	C ₈₀₁	0.022 μ F 50WV "
1-105-665-12	C ₅₀₆	0.0022 μ F 50WV Mylar	-681-12	C ₈₀₂	0.047 μ F 50WV "
1-121-115-01	C ₅₀₇	100 μ F 6WV Electrolytic	-679-12	*C ₈₀₃	0.033 μ F 50WV "
1-105-291-12	C ₅₀₈	0.22 μ F 50WV Mylar	-681-12	C ₈₀₄	0.047 μ F 50WV "
1-121-143-05	C ₅₀₉	10 μ F 50WV Electrolytic	-725-12	C ₈₀₅	0.1 μ F 100WV "
1-105-721-12	C ₅₁₀	0.047 μ F 100WV Mylar	1-121-024-11	C ₈₀₆	1000 μ F 15WV Electrolytic
-721-12	C ₅₁₁	0.047 μ F 100WV "	1-105-292-11	C ₈₀₇	0.055 μ F 250WV Mylar
1-121-118-01	C ₅₅₁	10 μ F 12WV Electrolytic	-753-12	*C ₈₀₈	0.01 μ F 200WV "
-121-01	C ₅₅₂	200 μ F 12WV "	-721-12	C ₈₀₉	0.047 μ F 100WV "
-102-01	C ₅₅₃	30 μ F 6WV "	1-121-148-01	C ₈₁₀	1 μ F 100WV Electrolytic
-122-01	C ₅₅₄	50 μ F 12WV "	1-113-122-11	C ₈₁₁	0.05 μ F 500WV Mylar
-121-01	C ₅₅₅	200 μ F 12WV "	-122-11	C ₈₁₅	0.05 μ F 500WV "
1-127-906-00	C ₆₀₁	1 μ F 10WV "	1-121-024-11	C ₉₀₃	1000 μ F 15WV Electrolytic
-907-00	C ₆₀₂	3 μ F 6WV "	-023-11	C ₉₀₄	4000 μ F 15WV "
-906-00	C ₆₀₃	1 μ F 10WV "	1-119-106-00	C ₉₀₅	100 μ F 15WV "
1-105-687-12	C ₆₀₄	0.15 μ F 50WV Mylar	-042-00	C ₉₀₆	50 μ F 12WV "
-679-12	C ₆₀₅	0.033 μ F 50WV "	-044-00	C ₈₀₇	30 μ F 12WV "
-673-12	C ₆₀₆	0.01 μ F 50WV "			

Electrical Parts List (B)

Part No.	Description	Q'ty	Part No.	Description	Q'ty
	A. General				
	Cabinet & Appearance Block		1-502-100-11	Speaker	1
1-507-047-00	Twin Earphone Jack	1	1-536-085-11	1-2P Lug Terminal Board	1
-113-13	Antenna Jack	1	-107-11	1-1P Lug " "	1
1-513-216-11	Charging Switch	1	-063-11	1-3P Lug Terminal Board	
	Telescopic Antenna	1		Carton & Accessories	
1-506-108-00	Connector Terminal	8	X-40056-58-1	Accessory Ass'y, including	1
1-501-108-00	Connector Terminal K	2	4-004-162-01	Polyethylene Bag for Accessory	(1)
			1-504-010-02	Earphone	(1)
			1-534-041-21	4P AC Power Cord	(1)
	Main Block			Deflection Yoke	
1-441-205-11	Power Transformer	1	1-451-003-02	Deflection Yoke Ass'y, including	1
1-421-126-11	Filter Choke Coil for Power Supply	1	1-451-004-00	Core	(1)
-106-18	Vertical Output Choke Coil	1	4-002-703-00	Yoke Cover	(1)
1-531-106-17	Selenium Rectifier	1	-704-00	Band for Yoke	(1)
1-532-039-11	Fuse	1	-705-00	Centering Magnet A	(1)
1-519-007-17	Neon Lamp	1	-706-00	" " B	(1)
1-506-063-11	4 Pole Plug	1	-707-01		
1-545-003-11	Multi Jack	1	-707-02	Centering Magnet Holding Bracket	(1)
1-526-052-06			-708-01		
-052-07	Picture Tube Socket	1	-708-01	Band for Core	(1)
1-407-030-11	Micro Inductor 150 μ H L ₉₀₁	1	-709-00	Speace for Centering Magnet	(2)

Part No.	Symbol	Description	Part No.	Symbol	Description
1-101-118-05	C ₃₃₄	10 μ F 12WV Electrolytic	1-127-906-00	C ₆₀₇	1 μ F 10WV Electrolytic
-004-11	C ₃₃₅	0.01 μ F Ceramic	1-105-685-12	C ₆₀₈	0.1 μ F 50WV Mylar
1-121-121-05	C ₃₃₆	200 μ F 12WV Electrolytic	-685-12	C ₆₀₉	0.1 μ F 50WV "
-012-11	C ₄₀₁	5PF Electrolytic	1-127-908-00	C ₆₁₀	3 μ F 100WV Electrolytic
-113-18	C ₄₀₂	30PF "	1-121-104-01	C ₆₁₁	10 μ F 6WV "
1-103-041-12	C ₄₀₄	330PF Polystyrol	-110-01	C ₇₀₁	30 μ F 10WV "
1-101-017-11	C ₄₀₆	200PF Ceramic	-085-11	C ₇₀₂	20 μ F 12WV "
-157-11	C ₄₀₇	1PF "	-122-01	C ₇₀₃	50 μ F 12WV "
-007-11	C ₄₀₈	0.05 μ F "	1-127-914-11	C ₇₀₄	5 μ F 6WV "
-115-19	C ₄₀₉	30PF "	-104-15	C ₇₀₅	10 μ F 6WV "
-571-11	C ₄₁₀	140PF "	1-121-219-11	C ₇₀₆	503 μ F 12WV "
1-121-104-05	C ₄₁₁	10 μ F 6WV Electrolytic	-122-01	C ₇₀₇	50 μ F 12WV "
1-101-424-15	C ₄₁₂	500PF Ceramic	-136-01	C ₇₀₈	2 μ F 50WV "
-424-15	C ₄₁₃	500PF "	1-105-677-12	C ₇₀₉	0.022 μ F 50WV Mylar
-007-11	C ₄₁₅	0.05 μ F "	-035-00	C ₇₁₀	0.05 μ F 100WV "
-004-11	C ₄₁₆	0.01 μ F "	-677-12	C ₈₀₁	0.022 μ F 50WV "
1-105-665-12	C ₅₀₆	0.0022 μ F 50WV Mylar	-681-12	C ₈₀₂	0.047 μ F 50WV "
1-121-115-01	C ₅₀₇	100 μ F 6WV Electrolytic	-679-12	*C ₈₀₃	0.033 μ F 50WV "
1-105-291-12	C ₅₀₈	0.22 μ F 50WV Mylar	-681-12	C ₈₀₄	0.047 μ F 50WV "
1-121-143-05	C ₅₀₉	10 μ F 50WV Electrolytic	-725-12	C ₈₀₅	0.1 μ F 100WV "
1-105-721-12	C ₅₁₀	0.047 μ F 100WV Mylar	1-121-024-11	C ₈₀₆	1000 μ F 15WV Electrolytic
-721-12	C ₅₁₁	0.047 μ F 100WV "	1-105-292-11	C ₈₀₇	0.055 μ F 250WV Mylar
1-121-118-01	C ₅₅₁	10 μ F 12WV Electrolytic	-753-12	*C ₈₀₈	0.01 μ F 200WV "
-121-01	C ₅₅₂	200 μ F 12WV "	-721-12	C ₈₀₉	0.047 μ F 100WV "
-102-01	C ₅₅₃	30 μ F 6WV "	1-121-148-01	C ₈₁₀	1 μ F 100WV Electrolytic
-122-01	C ₅₅₄	50 μ F 12WV "	1-113-122-11	C ₈₁₁	0.05 μ F 500WV Mylar
-121-01	C ₅₅₅	200 μ F 12WV "	-122-11	C ₈₁₅	0.05 μ F 500WV "
1-127-906-00	C ₆₀₁	1 μ F 10WV "	1-121-024-11	C ₉₀₃	1000 μ F 15WV Electrolytic
-907-00	C ₆₀₂	3 μ F 6WV "	-023-11	C ₉₀₄	4000 μ F 15WV "
-906-00	C ₆₀₃	1 μ F 10WV "	1-119-106-00	C ₉₀₅	100 μ F 15WV "
1-105-687-12	C ₆₀₄	0.15 μ F 50WV Mylar	-042-00	C ₉₀₆	50 μ F 12WV "
-679-12	C ₆₀₅	0.033 μ F 50WV "	-044-00	C ₉₀₇	30 μ F 12WV "
-673-12	C ₆₀₆	0.01 μ F 50WV "			

Electrical Parts List (B)

Part No.	Description	Q'ty	Part No.	Description	Q'ty
A. General					
1-507-047-00	Twin Earphone Jack	1	1-502-100-11	Speaker	1
-113-13	Antenna Jack	1	1-536-085-11	1-2P Lug Terminal Board	1
1-513-216-11	Charging Switch	1	-107-11	1-1P Lug "	1
1-506-108-00	Telescopic Antenna	1	-063-11	1-3P Lug Terminal Board	1
1-501-108-00	Connector Terminal	8			
	Connector Terminal K	2			
Cabinet & Appearance Block					
1-441-205-11	Power Transformer	1	Carton & Accessories		
1-421-126-11	Filter Choke Coil for Power Supply	1	X-40056-58-1	Accessory Ass'y, including	1
-106-18	Vertical Output Choke Coil	1	4-004-162-01	Polyethylene Bag for Accessory	(1)
1-531-106-17	Selenium Rectifier	1	1-504-010-02	Earphone	(1)
1-532-039-11	Fuse	1	1-534-041-21	4P AC Power Cord	(1)
1-519-007-17	Neon Lamp	1			
1-506-063-11	4 Pole Plug	1	Deflection Yoke		
1-545-003-11	Multi Jack	1	1-451-003-02	Deflection Yoke Ass'y, including	1
1-526-052-06	Picture Tube Socket	1	1-451-004-00	Core	(1)
-052-07			4-002-703-00	Yoke Cover	(1)
1-407-030-11	Micro Inductor 150 μ H L ₉₀₁	1	-704-00	Band for Yoke	(1)
			-705-00	Centering Magnet A	(1)
			-706-00	" " B	(1)
			-707-01	Centering Magnet Holding Bracket	(1)
			-707-02		
			-708-01	Band for Core	(1)
			-708-01		
			-709-00	Speace for Centering Magnet	(2)

Part No.	Description	Q'ty	Part No.	Description	Q'ty
1-536-047-11	Connector Terminal E	(4)	C. Wires and Miscellaneous		
4-002-758-01	⊖F 2 ϕ × 4 for Ycke	(1)	(Minimum Q'ty for Ordering: Meter)		
4-002-710-00	Terminal Board	(1)	Main Block		
High Voltage Block			7-621-078-02	P. V. C. Wires 0.16/17 Red	
1-453-010-11	High Voltage Block Ass'y, including	1	-078-03	" Orange	
4-002-698-11	Case	(1)	-078-04	" Yellow	
-699-00	Shielded Plate	(1)	-078-05	" Green	
-700-00	Table for Vacuum Tube	(1)	-078-06	" Blue	
4-003-660-02	High Voltage Block Holding Bracket	(1)	-078-07	" Violet	
4-002-702-01	Shielded Case	(1)	-078-08	" Gray	
1-101-034-00	Ceramic Capacitor	(3)	-078-09	" White	
1-536-047-11	Connector Terminal E	(3)	-078-00	" Black	
	Screw for Case	(2)	-078-01	" Brown	
7-622-105-01	Nut 2 ϕ	(2)	7-611-031-61	Tine Plated Copper Wire 0.6 ϕ	
4-005-537-01	High Voltage Block Caution Label	(1)		Braided Wire 16/14/0.08	
X-40056-59-1	Horizontal Output Transformer, including	(1)	7-613-010-21	P. V. C. Shielded Wire UL # 1185	
1-439-003-02	Ferrite Core V-36R	(1)		Co-axial Cable 0.8D2V Black	
1-526-112-11	Anode Connector, including	(1)	7-631-102-04	Spaghetti Tube 1 ϕ Yellow	
4-005-613-01	Anode Connector Cover	(1)	7-632-106-09	Vinyle Tube (transparent) 1.7 ϕ	
-614-01	Spring for Anode Connector	(1)	" "	4 ϕ	
			" "	8 ϕ	
				Vinyle Tube (Back) 4 ϕ	
				" " 8 ϕ	
Deflection Block			High Voltage Block & Deflection Block		
1-538-162-22	Deflection Printed Circuit Board	1	1-902-037-11	P.E.—P.V.C. Wire 12/0.18	
			7-632-110-09	Transparent Vinyle Tube I. D. 3.5 ϕ	
				" O. D. 4.0 ϕ	
Video & Sound Signal Block			Deflection Block		
1-538-308-11	Signal Printed Circuit Board	1	7-612-077-04	P. V. C. Wires 1/0.65/1.6 Yellow	
-309-11	Sound Signal Printed Circuit Board	1	-079-10	" 11/0.16/1.45 Black	
Synch. Separation Circuit			Video & Sound Signal Block		
1-538-300-12	Synch. Separation Printed Circuit Board	1	7-612-078-00	P. V. C. Wire 17/0.16 Black	
			1-507-109-00	Cconnector Tip K	2
B. Tube					
73110510	Picture Tube 140 CB4	1			
1-525-039-00	High Voltage Rectifier Tube	3			

Part No.	Description	Q'ty	Part No.	Description	Q'ty
Y-40036-03-1	Tuner Block		X-40046-54-1	Deflection Block	
X-40054-51-1	Video & Sound Signal Block		X-40056-55-1	High Voltage Block	
X-40056-52-1	Sound Block		1-451-003-02	Deflection Ycke	
X-40056-53-1	Synchro. Separation Block				

Mechanical Parts List

Part No.	Description	Q'ty	Part No.	Description	Q'ty
	A. General			Main Block	
	Cabinet & Appearance Items		4-005-603-01	Chassis	1
4-003-607-01	Cabinet (Front)	1	4-003-621-02	Multi-Jack Mounting Bracket	1
-608-01	Antenna Bushing (Black)		-4005-604-01	L Shaped Bracket	1
-608-11	" (White)		-605-01	Tuner Holding Plate	1
-609-01	Mask (Black)	1	-606-01	Insulation Plate	1
-609-11	" (White)	1	-607-01	Capacitor Clamper (Small)	1
-610-01	Picture Tube Mounting Spacer	2	-608-01	" (Large)	1
4-002-781-00	Dust Proof Rubber Band	1	4-003-626-02	Speaker Mounting Bracket	2
-811-00	Picture Tube Protector	1	0-214-123-00	Speaker Mounting Cushion	4
X-40036-03-2	Picture Tube Mounting Bracket Assembly, including	1	4-002-806-03	Speaker Mounting Screw	1
4-003-611-02	Picture Tube Mounting Bracket	(2)	-646-01	Earphone Label	2
4-002-778-00	Picture Tube Mounting Ring	(1)	4-003-657-01	Signal Circuit Board Mounting Washer	1
-780-00	Picture Tube Grounding Spring	(1)	-627-01	Insulation Sheet for Deflection Circuit Board	1
7-623-505-01	Lug 2φ	(1)	-625-01	Variable Resistor Mounting Bracket	1
4-005-601-01	Rear Cabinet (Black)	1		Circuit Board Block	
-601-11	" (White)	1	4-003-601-01	Heat Sink for Hor. Power Tr. A	1
4-002-730-00	Rear Foot	2	4-002-681-01	" B	1
X-40056-02-1	Carrying Handle Assembly, including	1	4-003-602-01	Heat Sink for Ver Power Tr. A	1
4-003-010-01	Carrying Handle	(1)	-603-01	" B	1
-011-02	Carrying Handle Reinforcement	(1)	-114-02	Insulator	1
-012-22	Carrying Handle Side Piece	(2)		Insulator for Heat Sink	2
-013-01	Carrying Handle P.V.C. Sheet	(1)		Block Separation Circuit Board Mounting Bracket	1
4-003-619-03	Charging Switch Label	1		Heat Sink for Tr. #206	1
-346-01	Antenna Clamper (Black)			Accessories & Packing Materials	
-346-31	" (White)	1	4-005-609-01	Styro-Foam Cushion (Front)	1
X-40026-06-2	Table Stand Assembly, including (Black)	1	-610-01	" (Rear)	1
4-002-623-02	Table Stand	(1)	-611-01	Packing Carton (Black)	1
-732-02	Friction Spring	(2)	-611-11	" (White)	
-788-00	Table Stand Cushion	(1)	-612-01	Packing Carton for 2 sets (Black)	1/2
-789-01	Table Stand Mounting Screw	(2)	-612-11	" (White)	
-790-00	Stand Mounting Bracket (Left)	(1)	4-002-669-00	Polyethylene Bag	1
-791-00	" (Right)	(1)	-839-00	IBM Card	1
4-003-014-01	Table Stand Cushion	(1)	X-44900-02-1	Polishing Cloth in Polyethylene Bag	1
-001-01	Stand Cushion Mounting Screw	(2)	4-490-012-00	Polyethylene Bag	(1)
7-622-307-02	Nut 2.6φ for Stand Mounting Bracket	(3)	4-002-849-01	Polishing Cloth	(1)
X-40030-07-1	Table Stand Assembly, including	1	X-40056-04-1	Warranty Card Assembly, including	1
4-002-623-02	Table Stand	(1)	4-494-109-10	Warranty Card	(1)
-732-02	Friction Spring	(1)	-100-10	Transistor Warranty Card	(1)
-781-01	Stand Mounting Screw	(2)	4-002-826-02	Polyethylene Bag	(1)
-790-01	Stand Mounting Bracket (Left)	(1)	4-495-109-10	Instruction Manual	1
-791-10	" (Right)	(1)	X-40056-05-1	Card Assembly, including	1
4-003-014-01	Table Stand Cushion	(1)	4-003-032-01	Inspection Card	(1)
-001-01	Stand Cushion Mounting Screw	(2)	4-498-109-10	Adjustment Card	(1)
7-622-307-02	Nut 2.6φ for Stand Mounting Bracket	(3)	4-493-104-10	Caution Card	(1)
X-40036-10-2	Front Panel Assembly, including (Black)	1		B. Screw & Washer	
4-003-629-02	Front Panel	(1)		(Minimum Q'ty for Ordering : 100 pcs.)	
-630-01	UHF Tuning Scale Cover	(1)		Cabinet & Appearance Items	
X-40056-06-1	Front Panel Assembly, including (White)	1		Screw	
4-003-629-22	Front Panel	(1)	7-621-259-33	⊕P 2.6φ × 5 (for Mask)	4
-630-01	UHF Tuning Scale Cover	(1)	-561-43	⋈ K 3φ × 6 (for Ant. Bushing)	1
X-40032-10-2	Channel Selector Knob Assembly	1		(for Antenna)	1
X-40036-11-1	Volume Control Knob Assembly	1		(for Chassis)	4
X-40032-12-1	Fine Tuning Knob Assembly	1	7-621-262-62	⊕P 3φ × 30 (for Picture Tube Mounting)	1
4-003-019-03	Control Knob	4	-561-53	⋈ K 3φ × 8 (" ")	2
-632-01	" SONY " Badge	1	-559-52	⋈ K 2.6φ × 8 (for Antenna Clamper)	1
4-005-602-01	Specification Label	1	-559-58		
4-003-664-01	Control Knob Spacer	1			
4-004-143-01	Serial No. Label	1			

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Part No.	Description	Q'ty	Part No.	Description	Q'ty
7-621-259-38	⌘ K 2.6φ × 5 (for Table Stand)	4	7-621-722-42	⊕ P 3φ × 6 (for Capacitor Clamp Small)	1
-259-39	⌘ P 4φ × 6 (for Carrying Handle)	2		(for Variable Resistor Mounting Bracket)	2
-268-42	⌘ K 2φ × 4 (for " SONY " Badge)	2	7-621-721-73	⊕ K 2.6 × 6 (for Deflection Circuit Board)	3
-555-29					
-770-48}	⌘ B 2.6φ × 12 (for Front Panel)	3			
-770-52}					
-261-49	⌘ R 3φ × 6 (for Cabinet)	4			
	Self Tapping Screws				
7-621-721-72}	⊕ R 2.6 × 6 (for Cabinet)	3	7-623-410-05	Spring Washer 4φ (for Multi-Jack)	1
-721-74}				(for L Shaped Bracket)	1
				(for Tuner)	2
				(for High Voltage Block)	1
7-623-210-22	Spring Washer 4φ (for Carrying Handle)	2	7-623-210-22	4φ (for Power Transformer)	1
			-207-22	2.6φ (for Earphone Jack)	2
	Main Block				
	Screw			Washer	
1-621-261-42	⊕ P 3φ × 6 (for Multi-Jack)	1	7-623-408-05	3φ (for Selenium Rectifier)	1
	(for 4 Pole Plug)	2	-108-12	3φ (for Choke Coil)	2
	(for Chock Coil)	2			
	(for Tuner Holding Plate)	2		Nut	
	(for High Vcltage Block)	1	7-622-107-02	2.6φ (for Earphone-Jack)	2
	(for Speaker Holding Block)	2	-308-02	3φ (for Speaker)	4
	(for Sound Circuit Board)	2			
	(for Signal Circuit Board)	2		Circuit Board Block	
7-621-261-22	⊕ P 3φ × 4 (for Charging Switch)	2		Screw	
	(for Capacitor Clamp Small)	1	7-621-261-52	⊖ P 3φ × 8 (for Transistor)	2
	(for L. Shaped Bracket)	1	-255-62	⌘ P 2φ × 10 (for Transistor)	2
	(for 1-2P Lug)	1	-255-52	⌘ P 2φ × 8 (for Transistor)	2
			-255-42	⌘ P 2φ × 6 (for Heat Sink)	2
7-621-262-18	⊕ P 3φ × 18 (for Selenium Rectifier)	1			
-261-72	⌘ P 3φ × 12 (for Capacitor clamp large)	1	7-623-408-01	Washer 3φ (for Transistor)	2
-259-62	⊕ P 2.6φ × 10 (for Earphone Jack)	2			
-268-42	⌘ P 4φ × 6 (for Power Transformer)	2		Nut	
-311-43	⊖ F 3φ × 6 (for Tuner)	2	7-622-105-02	2φ (for Transistor)	2
			-108-02	3φ (" ")	4
	Self Tapping Screw				
7-621-722-42	⊕ P 3φ × 6 (for Terminal Lug)	2			

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